Social Impact Assessment (SIA) for the project "Sustainable Management of Peatland Ecosystems in Mekong Countries"

(GEF Mekong Peatlands Project, GEF ID: 9232)

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Acronyms

ADB Asian Development Bank

ASEAN Agreement on Transboundary Haze Pollution **AATHP**

APSMPE ASEAN Programme on Sustainable Management of Peatland Ecosystems

ASEAN Peatland Management Strategy APMS

BKN Beung Kiat Ngong

CBT Community Based Tourism **CPA** Community Protected Area DoE Department of Environment

Department of Natural Resources and Environment **DoNRE**

ELC **Economic Land Concession**

ESMP Environmental and Social Management Plan **ESMS** Environmental and Social Management System;

FPIC Free, Prior and Informed Consent GEF Global Environment Facility

GHG Greenhouse Gas ΗН Households

IUCN International Union for Conservation of Nature

MoE Ministry of Environment

MoNRE Ministry of Natural Resources and Environment

National Biodiversity Conservation Area **NBCA**

Nature Protection and Conservation Administration **NPCA**

NTFPs Non Timber Forest Products

PΑ Protected Area

PIF Project Identification Form **PKWS** Peam Krasop Wildlife Sanctuary

PPG Project Preparation Grant SEApeat Southeast Asia Peat Project SCN Save the Children Norway SCW Save Cambodia's Wildlife SIA Social Impact Assessment

TOR Terms of Reference

VDF Village Development Fund

I. Non-Technical Summary/Executive Summary of the Report

A. Overview

This Social Impact Assessment Report presents the findings of the consultant's short-term investigation of five villages in Cambodia and Lao PDR identified as pilot sites for Component 3 of the Peatlands Management Project. It is designed to complement the project document, providing deeper insight into the communities targeted by the project, and to draw attention to the specific needs and concerns of the communities during project implementation.

In order to write this report, the consultant conducted a desk survey of relevant secondary materials, and, together with staff from the Cambodian and Lao IUCN offices, undertook a field mission to the Lao PDR from 8 – 16 May 2017, and to Cambodia from 22-28 May 2017. During the Lao mission, she was joined by the ESMS coordinator from IUCN Headquarters, and during the Cambodian mission she was joined by an intern from the IUCN Asia Regional Office in Bangkok.

The content of the report provides a:

- Rapid assessment of the socio-cultural, economic and political context of the five pilot villages in both countries. Because the consultant is an anthropologist, she paid particular attention to cultural issues defining the communities which had significance for the peatlands. In addition, special attention was given to identifying vulnerable people living in the villages;
- Rapid assessment of gender context, gaps and opportunities in the targeted villages;
- Quick review of past and current land policies and rights for each of the countries;
- Investigation of how the villages use the peatlands in and around their villages; and, most importantly,
- An assessment of whether or not current usage will result in any negative or harmful impact on the peatlands, which if they do, would require the project reviewing and addressing these issues.

The consultant also looked at the project through the lens of IUCN's ESMS policy, and assessed whether or not any of the four ESMS Standards, or other environmental or social impacts, might be triggered through the project and its activities. The four standards are: (i) Involuntary Resettlement and Access Restrictions; (ii) Indigenous Peoples; (iii) Biodiversity and Sustainable Use Natural Resources; and, (iv) Cultural Heritage.

B. Key Findings of the Report

- Nearly all families in all five of the target villages rely on natural resources coming from the
 peatlands. In Lao PDR, families also relied on rain fed rice fields. However, in Cambodia, the
 villages were located within the mangrove areas and had no rice fields. Hence, the majority of the
 families relied almost entirely on collecting of marine and mangrove resources; their livelihoods
 depended on resources taken from the peatlands.
- 2. The investigation found that in all villages, both in Cambodia, and Lao PDR, there were landless people and families. There were reasons for the lack of land which are detailed in the below report. However, it is significant that landless families were often the poorest families, and as such, they were the most vulnerable. The consultant recommends giving priority to poor and landless families when developing income generating activities for the target villages.

3. IUCN ESMS Standards

A. Standard on Indigenous Peoples

- a. Lao PDR: There are no indigenous peoples living in the identified three pilot sites. However, the Standard on Indigenous Peoples is triggered if project activities go beyond the pilot sites and influence the wider areas around the Beung Kiat Ngong Ramsar site, which include villages inhabited by indigenous Brao communities, or in case the project expands its sites to Paksong District in the Bolaven Plateau. An Indigenous Peoples Plan (IPP) is not needed as no negative impacts are expected.
- b. <u>Cambodia:</u> Two Cham families live in Koh Kapik and three Cham families in Boeung Kachhang, Koh Kong Province. Although the Cambodian government does not recognize the Cham as "indigenous", according to criteria 3 of IUCN's definition of Indigenous People the Cham could be classified as indigenous. In Boeung Kachhang, the Cham currently reside outside the core area of the village, and they appear both poorer and more vulnerable than other villagers. Their presence in both of the pilot villages in Cambodia could trigger the ESMS Standard on Indigenous Peoples. However, after a deeper look at the Cham families living in one of the pilot sites, the consultant concludes that their situation does not differ significantly from other poor Khmer families living at the site, and that their distinctive culture is not under threat from the proposed project. Hence, it is suggested that a Standard on Indigenous Peoples is not triggered, and an ESMP or IPP is not needed.

B. Standard on Involuntary Resettlement and Access Restrictions

- a. <u>Lao PDR</u>: Based upon the short assessment, it is believed that this standard is not triggered. This decision is dependent on the local communities continuing to use the peat areas only in traditional ways, which, for the moment, do not seem to have harmful impact on the peatlands hence there is no need for the project to promote a restriction of access or use of peatland resources. Nonetheless, the situation should be reassessed at the beginning of the project when the biophysical assessment of the peatland has confirmed that its current use is truly sustainable and during project implementation to guarantee that commercial extraction and other ways of using peat unsustainably does not begin. In case the project would require access restrictions, the standard would be triggered. Hence Annex D contains elements of a Process Framework.
- b. <u>Cambodia</u>: Based upon the short assessment, it is not possible to make a definitive decision on whether or not this standard is triggered. This is because the exact locations of the peat areas within the pilot villages in the Peam Krasop Wildlife Sanctuary (PKWS) are not yet known. Based upon the preliminary surveys conducted by peat expert Dr. Quoi Le Phat, a large number of peat and potential peat areas have been identified in and around Koh Kapik and Boeung Kachhang, the two pilot sites. However, it is unclear whether or not these peat areas are found within the Community and Sustainable Use Zones. The zoning for the wildlife sanctuary was done before peat was taken into consideration, and human activities and other uses are permitted by the Kingdom of Cambodia's Protected Area Law (2008) in both the Community Use Zone and the Sustainable Use Zone. Because it is possible that people's houses are sitting on top of peatlands in Boeung Kachhang, IUCN will have to determine whether or not this will have harmful impact on the peat. In case the project would require access restrictions or limited/targeted relocation of people, the standard would be triggered. Hence Annex D contains elements of a Process Framework.

4. Women

In general, one of the key findings with regard to women living in the target areas in both Lao PDR and Cambodia was that the project was envisioned as having a positive impact on their lives. The women identified the project as a way to improve their environment, which in turn, improved the quantity of the aquatic and marine resources upon which they relied. However, the primary reason is that they saw the project as a means to promote better livelihoods and economic development. The potential of ecotourism activities was raised by the women in both Lao PDR and Cambodia as an opportunity to generate income while protecting their environment.

5. Vulnerable Members of the Communities

The SIA consultation found that landlessness was more widespread in the Lao PDR than was previously believed. Landlessness was often linked with historical circumstances, and, was also prevalent among widows with no grown children or other family members to care for them. The project could have negative impacts on these members of the community.

6. Overall Impacts of the project on the communities

A. Lao PDR

In conclusion, the project is not expected to have negative impact on the villagers living in the three pilot sites in Champasak. After consultations with the villagers and investigating the ways in which the villagers living around Beung Paphat seasonally use this peatland, it appears likely that the activities designed in the project will enable the villagers to engage more proactively with protection and management of their environment.

Concrete threats to the peat found inside the Beung Kiat Ngong wetlands (the Ramsar Site) have been noted during the past decade, for example, extracting the peat to make fertilizer, cutting and burning the grasses in the wetlands during the dry season, and potentially overharvesting the fish and other aquatic resources. However, these threats were addressed through new regulations created when Beung Kiat Ngong was listed as a Ramsar Site in 2010. At the same time, provincial and district authorities worked to raise the awareness of the local villages regarding the value of safeguarding the ecosystems of the wetlands.

B. Cambodia

Unlike in Lao, it is concluded that the project could have potential negative impacts on the lives of the communities living in the target villages. But this has been covered above under the Standard on Involuntary Resettlement and Access Restrictions. No other negative social impacts from the project are expected.

II. Project Description

Because the project has been fully described in the Project Document, please refer to this document for a detailed project description. This section of the report will summarize goals and objectives of the project, its primary activities, and situate the Social Impact Assessment within the project framework.

A. Overview of the Project Objectives

In short, the project will enhance the importance of peatland conservation within the larger context of wetland ecosystems within Southeast Asia. As stated in the project document, the goal of the project is to sustainably manage peatland ecosystems in targeted countries (Cambodia, Lao PDR and Myanmar), and to conserver biodiversity and reduce greenhouse gas (GHG) emissions, by:

- 1. Expanding the network of protected peatland ecosystems in the countries in line with the AICHI Target 11;
- 2. Strengthening the capacity for sustainable peatland management at local, national and subregional levels; and
- 3. Strengthening the management of peatland in existing protected areas to demonstrate sustainable management of peatland to conserve biodiversity, reduce GHG emissions and strengthen sustainable livelihood for local communities.

The project will contribute to the ASEAN Programme on Sustainable Management of Peatland Ecosystems 2014-2020 (APSMPE) endorsed by the ASEAN Environment Ministers in 2013, the ASEAN Agreement on Transboundary Haze Pollution (AATHP).

The project will be comprised of the following four components:

Component 1: Expansion of the network of protected peatlands in Mekong countries

Component 2: Capacity and national planning

Component 3: Demonstration of sustainable peatland management

Component 4: Regional cooperation.

Activities for Component 1 include:

- 1. Surveys to identify peatland ecosystems in Cambodia, Lao PDR and Myanmar
- 2. The value of peatland ecosystems for biodiversity and ecosystem services, climate change regulation, the land status and level of degradation of important sites assessed and documented
- 3. Priority peatland sites for conservation and rehabilitation are identified and conservation measures initiated

Activities for Component 2 include:

- 1. Strengthening the capacity for sustainable peatland management at local, national and subreginal levels.
- 2. Building awareness and understanding of the functions and importance of peatlands in targeted countries

Activities for Component 3 will enhance the protection and sustainable use of the peatlands in:

- 1. Peam Krasop Wildlife Sanctuary, Cambodia
- 2. Scattered wetlands in the vicinity of the Beung Kiat Ngong Ramsar Site, Lao PDR
- 3. Inle Lake Watershed, Myanmar

Activities for Component 4 include:

1. Experiences and best practices for assessment and peatland management in Mekong countries documented and shared

- 2. Capacity strengthened through the development of common knowledge products and cross country exchanges
- 3. Technical project implementation support and coordination provided.

B. Overview of the ESMS Process

The consultant was requested by IUCN to conduct a Social Impact Assessment (SIA) for the project before the completion of the project document itself. The need for conducting a SIA was identified by the ESMS Screening which is the first quality assurance step in the Environmental and Social Management System (ESMS). The purpose of the SIA is to make an assessment of potential impacts the project will or could have on the communities as early as possible in the project formulation process, and to assess the degree of the risks of these impacts. By doing the SIA at this stage of project formulation, IUCN is already including the participation of the targeted communities at a time when their opinions and recommendations can be included in the project design.

In accordance with ESMS Policy Framework the SIA will be guided by eight overarching principles and four standards that reflect key environmental and social areas and issues that are at the heart of IUCN's conservation approach (see figure 1 below). Thematic coverage of risk identification, however, also requires capturing possible other social risks. Examples of such risk issues are shown in the outer frame of the figure below and includes safety issues and impacts on physical and social health and well-being of local communities but also other community impacts including disturbances to patterns of social relations and social cohesion, potential of project benefits leading to discrimination or marginalization of certain groups as well as potential socio-economic impacts such as increase in vulnerability due to economic losses of people's or community assets such as crops, livestock or infrastructure.

The SIA was originally planned to focus on activities planned as part of Component 3, which aims at demonstrating best management practices by concrete field interventions in selected sites in Cambodia, Lao PDR and Myanmar. Due to time restraints, the SIA focused on sites in Cambodia and the Lao PDR.



Figure 1: ESMS Policy Framework: Standards, Principles and other social and environmental risks issues

III. Analysis of policy, legal, and administrative framework

Not Applicable for this report

IV. Stakeholder identification and analysis

The core stakeholder identification and analysis was conducted by Dr. Quoi Le Phat, the scientific consultant for wetlands and peat and Ms. Shelley Gustafson, the IUCN team leader for designing the project (in the following referred to a design team).

As part of this consultant's TOR, she reviewed the analysis and added additional stakeholders deemed important for the overall analysis. The additions to the stakeholder analysis are provided in Appendix F.

V. The Name for Peat in the Local Languages

Before beginning the field research, the SIA mission team wanted to understand whether or not there was a specific word for "peat" in either the Lao or Khmer language, and, more important, whether or not the villagers living in and around peatlands distinguished the soil scientifically classified as peat from other kinds of soils in the wetlands.

The information we have so far suggests that there is no word in the Lao language that specifically means "peat". The term "beung" (also spelt "bung") means wetlands, and that the word also refers to the soil found in the wetlands. Villagers were aware that the very dark, spongey soil found in wetlands was fertile, and could be used for agriculture.

We not only posed this question to the villagers themselves, but also, later in Vientiane, to Lao project officers at the ADB overseeing the BCC project. They also could not provide a Lao word for "peat", and like the villagers, only noted that the word "beung" means wetlands.

Unlike the Lao language, the Khmer language distinguishes between wetlands, dey seum, and peat, dey momouk. However, as we discovered during our consultations, the local communities are not always clear about the distinction between dey seum and dey momoukdey momouk, and do not completely understand why the kind of soil called dey momouk dey momouk is so important. Villagers in both Koh Kapik and Boeung Kachhang were familiar with the spongey, dark, fertile soil found in and around their villages and inside the mangrove area.

Understanding the definition of peat will be significant for IUCN when the project develops awareness raising materials for villagers in the project area.

VI. Socio-cultural, economic, historical, institutional and political context and identification of impacts

A. Lao PDR

Brief Timeline of Lao Modern History

In order to understand the situation of villagers in Champasak today, it is necessary to understand, even if superficially, a timeline of the modern history of Laos, which began with French colonialization and ended with the creation of the Lao People's Democratic Republic in December 1975.

Throughout most of its history, small, landlocked Laos frequently found itself physically divided between Thailand (then the Kingdom of Siam) and Vietnam. Then, under French colonial rule, (1893 to 1954), Laos emerged as an entity (Grant Evans 2002: 45).

The twenty years following independence from France were ones of strife and civil war. It was during this period that the communist party of the Lao PDR was founded (the Pathet Lao), and the close relationship with Vietnam was forged, a relationship that shaped modern socialist Lao. During these years, Laos was also drawn into the larger conflict in that engulfed the region, fighting not only each other, but the French, and the United States as well. The years of fighting ended in 1975 when the Pathet Lao won the war, and in doing so, took over and unified the country from the north to the south.

The initial two years of rule under the Pathet Lao were harsh. Educated Lao who had not already fled abroad, did so now to neighboring Thailand, France and the US. Remaining members of the elite were sent to re-education camps located in remote areas of the country. As part of the new socialist economy, all land in Laos was declared state land, and the People's Revolutionary Party collectivized all agricultural land. For nearly the first 10 years after the revolution, not much was known about events in Laos, and few people were granted access.

Since the late 1980's the political situation in Laos began to change and the country became more open. Although it is still a poor country, and still receives substantial international development aid, it has made major progress in developing its new socialist economy and society.

1. Overview of Land Policies and Rights in Lao PDR and the Specific Communities

Prior to 1975, land in the Lao PDR, in theory, belonged to the king. In reality, land was managed locally through customary law overseen by traditional village headman. In lowland Lao villages, land was usually determined by usufruct. If land was not used for 3 years, then, the village headman had the right to redistribute the land to families who would. In upland areas, the ethnic groups who lived there practiced swidden agriculture with cycles that were 6 years minimum. Population density was, and still is, very low in the Lao PDR, and conflict regarding land use was uncommon.

In 1975, the newly formed government of the Lao PDR collectivized the land, and urged the rural communities to farm their land together and collectivize their tools of production, namely buffalo and wooden ploughs. The collectivization policy, which lasted from 1975 to 1986, was, by most standards, not successful. Rice production fell, and farmers in many rural areas did everything they could to sabotage the system. By the early 1990's, the government, admitting defeat, announced a new policy

of the "socialist market economy", an economy which included private ownership and free enterprise (Ducourtieux et al 2005:502, Saykham Boutthavong et al 2016). Land reform via a Prime Minister's Decree in 1993 accompanied the socialist economy.

The new policy essentially divided all land into "farmland, defined as areas farmed on a permanent basis, and forest land, defined as the remaining land of the village, whether wooded or not" (Ducourtieux et al 2005:505). Farmland was to be used productively, and forest land was to be protected. The latter created a problem because many of the ethnic groups in the Lao PDR live in upland areas, practicing shifting (swidden) agriculture. Swidden agriculture was banned in the Prime Minister's decree with the plan to eliminate it completely by 2020.

The Land Reform policy allocated land to Lao citizens which could be bought, sold, passed down to children or rented to others. The Land Titling Program (LTP) was led by MOF (Ministry of Finance) and funded by the Australian Government through the World Bank (Saykham 2016:5). This kind of land titling occurred mainly in urban or "pre-urban" areas. Land titling in rural areas proceeded slowly.

In Laos, land use rights can be divided into the following categories (Saykham Boutthavong et al 2016:2):

- a. The Land Titling Program (LTP) mainly in urban and pre-urban areas which grants permanent land rights (PLUR) as land titled (*bai ta din*) to individual households;
- b. The Land Use Planning and Land Allocation Program (LUP/LA) or Land and Forest Allocation (LFA) in rural areas across the country, which zones land for communities and grants "temporary land use rights in the form of a temporary land use certificate (TLUC) for agricultural land and forest land for individual households; and;
- c. The allocation of land area for large and medium-scale investment and development projects.

According to Saykham Boutthavong (2016:6), the LFA program is not without its problems. Not only is it a slow process, but it has caused threats to traditional land use systems. It has also created a system in which if migrants moved into area after the completion of the temporary land use rights have been decided, they will not be able to have access to land.

The Land Titling process is just beginning in the three villages where the project is working. At the moment, villagers only have temporary land certificates. The government is beginning to survey the land in order to give permanent land titling to villagers (notes from 9 May with PoNRE and DoNRE).

There were landless families in all three of the target villages. This issue is explored in more detail below.

2. Changes to the Target Villages

It is also important to note at the beginning of this section that the Social Impact Assessment Team recommended making changes to the target villages identified by the Project Design Team in their January 2017 report. The Project Design Team initially identified the following villages in Pathoumphone District, Champasak Province:

- a. Ban Thongxay
- b. Ban Naang (more correctly called Ban Kaeng Na'ang), and
- c. Ban Saming

As detailed in the project document (pg.20), a recent assessment of peatlands in Lao PDR conducted by the SEApeat (GEC 2015), identified peatlands in several provinces in Lao PDR. The most prominent peatlands were found in the Beung Kiat Ngong wetlands (listed as a Ramsar Site in 2010) in Champasak Province (see below map). Additional wetlands and potential peatlands were identified

in the vicinity of the Ramsar Site. Because the project design team was informed by local authorities that several organizations were already working on a variety of projects inside the boundaries of the Ramsar Site, the team made the decision to identify target villages which lay outside the boundaries of the site, but in the vicinity of other potential wetlands/peatlands. As noted above, the team initially identified three villages. These villages appeared to be closely linked with another wetland called Beung Naphat which is marked on the below map.

The SIA Team, after visiting Ban Saming on 9 May 2017, recommended that Ban Saming be dropped from the list, and substituted by Ban Kala (see map below) for reasons described below.

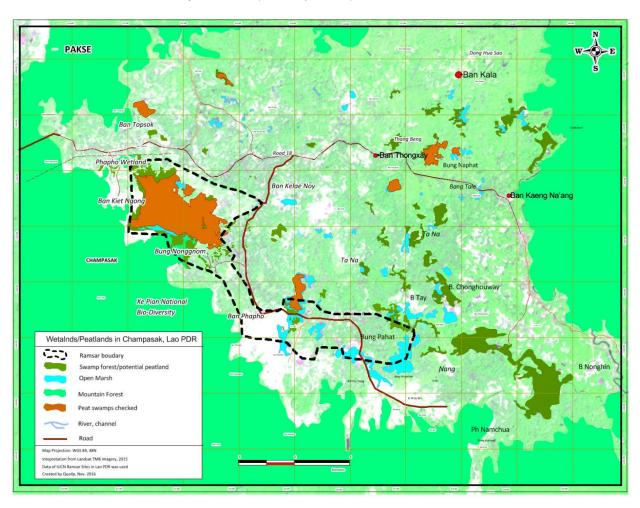


Figure 2: Wetlands/Peatland sites in Parkse and Champasak

Ban Saming is not identified on this map, however, it lies approximately 2 km away from Ban Thongxay, to the west and slightly north. Ban Saming is both a village and the administrative seat of a village cluster, a cluster which includes six villages, among them: (i) Ban Thongxay, (ii) Ban Kaeng Na'ang; (iii) Ban Kelae; (iv) Ban Saming; and (v) Ban Kala.

During our visit to Ban Saming, we learned that Ban Saming uses the ponds and wetlands immediately surrounding their village – 13 large ponds and 12 small ones. We were told that the peatland on which the project is focusing, Beung Paphat (called Beung Naphat on the map¹), belongs

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¹ The SIA team encountered some confusion during their first day in Champasak. The name of the wetland associated with the three villages was called Beung Naphat in both the project document and on the map. However, the name used by the local communities for this wetland is Beung Paphat. This report will use the

to Ban Thongxay, and is not used by the villagers living in Ban Saming. During the same village consultation we were told that that the villagers in Ban Kala did use this area.

Consequently, after consulting with colleagues in the IUCN Asia Regional Office, the decision was made to remove Ban Saming from the list of pilot sites, and add Ban Kala. This decision also meant that the team added a field visit to Ban Kala to the mission schedule.

3. Socio-cultural background

a. General Background

The three pilot villages where the project will implement activities, Ban Thongxay, Ban Kaeng Na'ang and Ban Kala, Pathoumphone District, are all lowland Lao communities. As such, they form part of the primary national population of the Lao PDR. Although they exhibit some minor differences with lowland Lao populations living in other parts of Lao PDR, they essentially share the same culture. This means that the speak Lao, a Tai language which is closely related to Thai.

Lowland Lao traditionally live in lowland areas in the close proximity of water. Their socio-economic culture is characterized by wet rice farming supplemented with small gardens near their houses and rice fields, fishing, and foraging and hunting in the forests and other natural areas. Lao villagers also raise livestock, notably cows, cattle, poultry (chickens and ducks) and some pigs. The villagers in the targeted communities are not different. Their staple food, rice, is grown in rain-fed fields (not irrigated) surrounding their villages. Interspersed among the rice fields, and sometimes near their houses are vegetable gardens where they grow such things as beans, eggplant, corn, pumpkin and chilies. They also grow fruits, for example, bananas and pineapples. The villagers in this area rely extensively upon the large numbers of wetlands for gathering freshwater aquatic resources, including many different kinds of fish, snails, frogs, and tadpoles, as well as various kinds of edible plants and mushrooms which grow in and around the wetlands. In the past, they also hunted larger mammals and birds inhabiting the forests surrounding the wetlands. Most of the larger animals have been exhausted, but some hunting of birds and small animals (like field rats) continues. Hunting, it should be noted, is prohibited in both the Ramsar Site area and the NBCA.

All lowland Lao are Theravada Buddhists, and their villages usually have one temple (*wat*). Young boys and men were expected to enter the temple at least one time during their lifetime, although it should be noted that young men who became ordained as Buddhist monks did not necessarily remain in the temple for a lifetime. Pre-Buddhist beliefs feature strongly in Lao religious and ceremonial life, and most villages have one or more sacred spaces in and around their village. These beliefs have been integrated into Buddhism for centuries. The villages in the project area were not exceptions.

b. Applicability of the IUCN Standard on Indigenous Peoples

As noted above, the task of the SIA is to make an assessment of potential impacts the project will or could have on the communities as early as possible in the project formulation process, and to assess the degree of the risks of these impacts. The SIA should look in particular at impacts on indigenous communities in order to comply with the ESMS Indigenous Peoples Standard. The standard identifies indigenous peoples according to three criteria:

- i. Peoples who identify themselves as indigenous
- ii. Tribal peoples who social, cultural and economic conditions distinguish them from other section of the national community, and who status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; and

name Beung Paphat. This name should <u>not</u> be confused with another wetland, Beung Pahat, which lies inside the Ramsar Site.

iii. Traditional peoples not necessarily called indigenous or tribal, but who share the same characteristics of social, cultural, and economic conditions that distinguish them from other sections of the community, whose status is regulated wholly or partially by their own customs or traditions, and whose livelihoods are closely tied to ecosystems and their goods and services.

Within this section, using IUCN's definition of "indigenous", it is important to assess whether or not the villagers living within the target villagers are indigenous or not. It is clear that the villagers living in the three target villages are all lowland Lao, the majority population in the Lao PDR, and, as such are not indigenous.

However, in an earlier period, the identified project area was also inhabited by Mon-Khmer (mostly Brao) communities who self-identify as indigenous. There are few of these non-Lao communities still living in the area, for example, Ban Houay Ko. However, the culture of the people living in that community, over the years, has become very similar with that of their lowland Lao neighbors. So, for example, they have embraced Buddhism and grow rice (personal communication, Ian Baird, 27 March 2017). Baird further noted that although the Brao villagers led lives similar to their Lao neighbors, they still experience discrimination.

So, although the SIA consultant believes that the IUCN Standard on Indigenous People is not triggered for the three pilot villages identified for project implementation, IUCN needs to be aware that indigenous people still live in some villages in the vicinity of the project area – especially if the project expands to include more villagers in the area of the Ramsar Site.

It should also be noted that the majority of the people living in the Paksong District of the Bolaven Plateau, an earlier identified project site, are indigenous. After the initial Project Concept Mission in January 2017, the team decided not to select this area for project implementation, recommending instead that the project only conduct awareness-raising workshops for the villagers there. In this case, before designing materials, an assessment should be made of the villages and villagers who will be targeted in order to design culturally and linguistically appropriate materials. The peoples living in the Bolaven plateau are mostly Mon-Khmer speakers, including Brao, Alak, Katu, Ta'oy and Suay. The Brao constitute the majority of the peoples living there. All of these groups self-identify as indigenous, speak their own languages, are non-Buddhist, and usually practice swidden or shifting agriculture, an agricultural method distinct from that practiced by the lowland Lao.

In conclusion, the villagers living in the three pilot villages are <u>not</u> indigenous; however IUCN's Standard on Indigenous Peoples is triggered if project activities go beyond the pilot sites and reach villages in the area of the Ramsar Site inhabited by indigenous Brao communities or expand its sites to the Paksong District of the Bolaven Plateau.

4. Socio-Economic Analysis of the Villagers living in the three Pilot Villages

The three identified target villages form a triangle around Beung Paphat, with Ban Thongxay being the closest. In the 1950's, Beung Paphat belonged to no particular village, and was considered common land. Although it was closest to Ban Thongxay, villagers from surrounding villages, for example, Ban Kala, Ban Saming, and Ban Kaeng Na'ang, also used this peatland/wetland area in some way. Around 1995 or 1996, the Pathoumphone district government decided to put Beung Paphat under formal land ownership of Ban Thongxay, mainly because it was the closest of all of the villages.

This is not considered a problem because the other villagers still had access and permission to use the *beung* by Ban Thongxay. These villagers could gather aquatic resources and collect fish using

nets and fishing lines. One difference, however, was with regard to the construction of loumpa, the traditional manmade fish ponds that characterize these wetlands. The customary regulations governing the use of loumpa is described below in this report.

History and Culture of Ban Thongxay

Older village men from Ban Thongxay do recall the history of the village, and it is they who remember the stories about Beung Paphat. According to them, Ban Thongxay was founded about 120 years ago (late 19th century c. 1897) by a Mr. Hom. Mr. Hom was a mahout (a man who rides, works with, trains and raises elephants). Other mahouts also went to Ban Thongxay, mahouts from an area in what is today Thailand, and also as far north as today's Xayabouri Province – a province also known for its elephant culture.

Elephants were known to live in the wild in the wetlands around Beung Kiat Ngong, including Beung Paphat. Hence, when asked why people went or moved to Ban Thongxay, the old men replied simply that they came for the elephants. Traditionally, elephants were important working animals, hauling rice and logs. They also served as transportation for the families who owned them. Over time, and as society modernized, elephants became less important to the lives of the villagers in this area, and many sold their animals to people in other provinces where people still used them, for example Xayabouri Province. One of the men we interviewed said that he sold his elephants around 10 years ago because his family needed the money to build a better house.

Interestingly, in their promotional materials, the provincial government lists "the culture of elephants" as one important aspect of the cultural heritage of Champasak (IUCN 2011:19). Currently, most villagers no longer raise or want to raise elephants. The few remaining elephants in the district are found at a special elephant center in Ban Kiat Ngong, a village located along the northwestern edge of the Ramsar Site where they are part of the tourist industry, giving rides to tourists through the site.

When asked if Beung Paphat was considered sacred, again, only the older men from Ban Thongxay knew the answer. The beung was the residence, they said, of "Jao Paphat" (the Lord of Beung Paphat), and he had to be propitiated through rituals and ceremonies. For example, before entering the beung to catch wild elephants, the mahout held a ceremony called Pa Boun for good luck. During the ceremony the mahout would offer a sacrifice. Today, when villagers enter the beung to fish or collect other resources, they still call out to Jao Paphat to let him know that they are there. Villagers from Ban Kala and Ban Kaeng Na'ang did not know about this tradition.

Statistics:

Population: 537 (217 are female) Primary School: 1 – closes secondary school is Ban Kelae. Households: 92 with 119 families By motorbike it is about 20 minutes.

Temple: 1 Cemeteries: 2

Sacred Forest: 1

Teachers: 3 (2 are female) Student: 58 (29 are female)



Figure 3: Cultural and Natural Resource Map of Ban Thongxay drawn by villagers

History and Culture of Kaeng Na'ang

This village is more recent – it was officially founded in 1985. Before the war, only a few families lived in this area. During the war years, people came here to make gardens because they knew the land was "good" (fertile). After enough people had gardens in the village area, several families decided to build houses and settle in the area. Many of these people came from the nearby villages of Ban Thongxay and Ban Kelae. Thus, the people who eventually settled down into this village were already familiar with the area from before 1975.

The villagers of Keng Na'ang also have their sacred area. We learned that the term "kaeng" means rapids, and Pi Na'ang is the name of the female spirit who resides in the rapids in Xi Khampo River. This is the river behind the village, and which also serves as a boundary between Champasak and Attapeu provinces. The spirit resides in an underwater rock that has the shape of a woman. Regular offerings are made to the spirit to protect the village, guarantee a good harvest and abundant fish. This shrine is marked on the village map below.

Statistics for Ban Kaeng Na'ang

Population: 1,257 (593 females) HH: 210 with 245 families Temples: 2 (2 monks)

One sacred area for the Spirit Pi Na'ang

Primary school: 1 Teachers: 3 (2 female) Students: 58 (29 female)

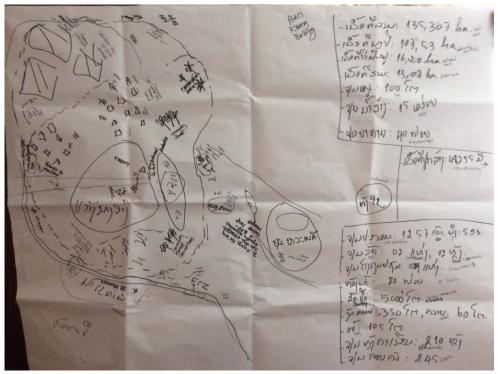


Figure 4: Cultural and Natural Resource Map of Ban Kaeng Na'ang drawn by villagers

History and Culture of Ban Kala

This village, like Ban Kaeng Na'ang, is a more recent village. The history of the village can be traced back to around 1950, when five mahout families moved to the location of the current village. According to elders, people moved here because it was an easy place to catch elephants. During this time the country was still at war (French-Vietnam War of Resistance), and it was remote noted that these families were fleeing the chaos the war. It was not until the mid-1970's that other families began to move into the area. The village, by today's standards, is more isolated than Ban Thongxay, Ban Saming and Ban Kaeng Na'ang. The reason is less actual physical distance, but the condition of the only road linking it to the main road which is extremely poor. It is dirt road, and during the rainy season, is nearly impassable. Nonetheless, it should be pointed out that during the 1970's none of the other villages had good access roads either, so the primary draw of the area was its elephants, and also "good" land.

The people who moved into the area during the 1970's were from other villages in today's Pathoumphone District, at a time when its remoteness was probably an advantage. The older man we were interviewing spoke with fondness of the abundant wild animals in the area when he moved into the village in 1975. He noted that tigers, bears, deer and wild boar roamed the area, and sometimes caused a problem with livestock. This elder had also been a Mahout, and previously owned 8 elephants. He sold them in around 1980 because people no longer used or need elephants...they had cars and motorbikes. He said that the money from selling the elephants could be used for buying a house, motorbike or tractor.

The elder further said that when families had elephants, the elephants grazed in areas around the villages and also in Beung Paphat. He also noted that at that time the grasses were tall and abundant. Beung Paphat is about 4 km from this village, and, in the past, when people went to the beung, they took rice with them because they usually could not return within one day.

Statistics for Ban Kala:

Population: 866 (394 females) Households: 138 with 174 families Temple: 1 with 1 monk and 1 novice

Sacred Forest: 1 Cemetery: 1 Loumpa: 75 Primary School: 1 Teachers: 5 (2 females) Students: 105 (59 female)

Figure 5: Natural and Cultural Resource Map for Ban Kala drawn by villagers

As demonstrated in the natural and cultural resource maps, all three villages engage in a mixed economy of wet rice agriculture, supplemented by small gardens, fishing and foraging in the peatlands/wetlands for aquatic plants and animals. Most families raise cattle, poultry (chickens and ducks), goats and some pigs.

In Ban Kala, because it is difficult for them to get to Ban Kelae (the nearest larger town with market), villagers sell their livestock to traders who are based Pakse, but who come to their village. They also sell rice, and said that rice was their primary source of income, and selling livestock was second.

The villagers from all three villages both sold the resources they gathered from the wetlands, and kept some for personal consumption. They estimated that approximately 80% were sold and 20% kept for personal consumption. These products were usually sold to each other in the village, or perhaps in the market in Ban Kelae, the nearest larger town.

On all of the village maps, villagers drew in the productive forests and conservation forests which surround their villages. They are allowed to collect wood for their houses from the community of productive forests, but in the conservation forests they can only gather NTFPs.

Cash crops include teak and other hardwoods. Teak, for example is grown in the community forests in Ban Thongxay and Ban Kaeng Na'ang. One tree, grown naturally, can be sold for 70,000 to 100,000 kip. Teak trees are owned by private individuals.

NTFPs include the *mak chong* nut (Malva nut) which is very valuable. It is used as an element in Chinese traditional medicine (Baird 2003). Ban Thongxay does not have *mak chong*, but Ban Kala does. May is not the season for *mak chong* – it is usually in January or February. The villagers told us that traders come to Ban Kala to purchase the *mak chong*. They are aware that they are getting a lower price for their *mak chong* than if they sold directly to Chinese. They said, for example, the Chinese will pay 30,000 kip per kilo. However, Chinese traders do not come to Ban Kala. We were told that the *mak chong* tree grows in commune forest, and as such, is accessible to all members of the community.

Around 10 families in Ban Kala grow cassava which they sell to a Thai company. It was noted that the income from cassava is not very good. The company only pays the seller 250 kip per one kilo of wet cassava and 840 kip for one kilo of dry cassava. A few families in Ban Kaeng Na'ang also grow cassava which they sell to a Thai company. On their village map the cassava fields were located in an area that was nowhere near any wetlands or ponds.

5. How is Beung Paphat Used?

a. Overview

The project will focus on the conservation of the peatland area Beung Paphat. Hence, understanding how the villagers use this *beung* is essential in order to determine if there is any threat to the peatlands,

First, it was pointed out to our team that many of the villagers seemed unaware of the commercial potential of peat. As an official from DoNRE noted, the local villagers use the peatlands every day, but they really do not understand the value of peat as an economic commodity. He further said that he personally does not want to discuss the economic value of peat with the villagers for feat that they might want to sell it!

This is not to say that villages in other parts of Pathoumphone district have not used the peat commercially. We know, for example, that from 2006 to 2009 peat from Beung Kiat Ngong (BKN) was being extracted from the northern part of the wetlands for fertilizer and sold to a Vietnamese company (IUCN 2011:26 and personal communication, DoNRE). Nonetheless, we were assured that the practice ceased in 2010 when BKN was listed as a Ramsar Site (personal communication DoNRE). In addition, it was noted that the holes made for extraction have been converted into fish ponds by the local villagers (IUCN 2011:26).

Beung Paphat is used by the three target villages in much the same way, and interestingly, there is little division of labor between men and women. The primary difference in usage patterns is between the wet and dry seasons. The rainy season in this part of Lao PDR begins around May, and continues through September. However, the accumulation of water from the rainy season does not dry out completely until later in the dry season. We were told that only from February through May/June, one finds little water in the peatlands. Thus, from June through December, the *beung* is mostly covered over with water.

b. Activities carried out in Beung Paphat

- Grazing cattle during the dry season. When asked if the cattle trod on the "peat" areas, thereby, damaging the peat, the villagers answered that the cattle avoid the soft, spongey areas, i.e. the peat.
- 2. Fishing is done throughout the year, but mostly during the rainy season. Both men and women fish with fishing lines by walking around the edges of the *beung* when it is filled with water. They also use baskets and nets while standing along the edges of the *beung*. Sometimes the men

wade into the *beung* up to their waist and use nets. The villagers from Ban Kaeng Na'ang also fish in the Xe Khampo River that flows behind the village. The fish collected include:

- Catfish
- Pa Kadeuk a small fish
- Pa Xieu a small fish
- Pa Ko snakehead fish
- o And other varieties.

3. Gathering fish using the *loumpa* (man-made fish traps).

The *loumpa* is the traditional method for harvesting fish in the wetlands in both Champasak and Attapeu provinces during the dry season. A *loumpa* is constructed by digging a hole in the wetlands area during the dry season (c. 1.5 m deep and 2 m across). It is described by some informants as constructing a "house for the fish". Wood branches are placed around the top border of the *loumpa*, and twigs and branches cover the surface. When the wetlands fill with water during the rainy season, the *loumpa* are submerged, and fish swim in and out of them. As the wetlands begin to dry out during the dry season, the fish congregate in the *loumpa* which are still filled with water. When the wetlands around the *loumpa* are dry, fish remain inside the *loumpa*, and can be easily harvested by scooping them out with baskets. *Loumpa* are reused for generations, and when they are retired, they are used as watering holes for cattle during the dry season.

Because this mission took place at the very end of the dry season, we were able to visit a section of Beung Kiat Ngong, which is part of the Ramsar site, and could walk out into the peat area. We saw older, established *loumpa*, and met the owner of one of the older ones. He himself was from Salavan province, but had migrated to this area for family reasons. The *loumpa* he managed had been used for three generations. This *loumpa* had already been "pumped out" three times during the dry season in order to collect the fish, and the process could still be repeated. These days villagers "pumping" the *loumpa* uses machinery...in the past pumping was done with nets. We also saw one abandoned *loumpa* which was being used as a watering hole for the cattle which were grazing there. Finally, we saw a newly constructed *loumpa* which would become functional during the upcoming rainy season.

Both men and women scoop out fish from the *loumpa*, but it is men who construct the *loumpa* and "pump" them during the dry season for better access to the fish.

Not all of the three villagers make and use *loumpa* in Beung Paphat. Because, as noted above, the *beung* now officially belongs to Ban Thongxay, and it is the families of Ban Thongxay who control access and use of the *beung*.

Families in Ban Thongxay have the most *loumpa* – more than 100. The villagers use the same hole every year for more than 10 years. Each year the *loumpa* must be repaired during the dry season. Sometimes the holes are dug deeper.

Villagers from Ban Kaeng Na'ang do <u>not</u> have *loumpa* in Beung Paphat, but they do have around 10 *loumpa* elsewhere in the wetlands nearer to their own village. As noted above, the reason these villagers do not have *loumpa* in Beung Papha is because they do not have rice fields near the *beung*. However, if a villager from Ban Kaeng Na'ang has a relative or family member living in Ban Thongxay, they are permitted to use that family's *loumpa*. Accordingly, we learned that five families from Ban Kaeng Na'ang use one *loumpa* each in Beung Paphat. However, these families are not permitted to dig new ones. Villagers from Ban Kaeng Na'ang are permitted to enter the *beung* to collect other resources.

The people in Ban Kala, because they have rice fields close to Beung Paphat, **are** permitted by Ban Thongxay to have their own *loumpa* in the *beung*. However, their numbers are small – only around

five (belonging to five families). Ban Kala is surrounded by its own wetlands which they list as around 75. During the rainy season, Ban Kala is surrounded by one large expanse of water when the smaller wetlands merge into one.

4. Collecting and gathering a variety of aquatic animal resources

All kinds of small aquatic animals are collected in the *beung*, most of them by both men and women. Collection continues throughout both the rainy and dry seasons with certain animals available during only one of the seasons.

Villagers collect:

- o Snails the villagers collect a variety of snails including the golden apple snail
- Frogs and tadpoles
- Shrimps different varieties of shrimp; some are big, some are small. Some are collected in the dry and others during the rainy season. Both men and women collect.
- o Crabs
- o Eels
- o Turtles
- o Ant and red ant eggs
- 5. A variety of methods are used for collecting the aquatic animal resources. They include:
 - Different kinds of bamboo baskets, including one that has a long handle and is used like a plunger;
 - o Traps
 - o Nets
 - o Fishing lines with hooks (also used to catch snails).

These items are mostly sold to each other in the village, but some are taken to a larger market, for example the one in Ban Kelae. Some are kept for personal consumption.

6. Collecting plants and vegetables

All kinds of plants are collected in the *beung* and the forest surrounding the *beung*. They are collected during both the rainy and dry seasons. Among the most important are:

- Mushrooms the villagers gather different varieties of mushrooms, some in the dry season and others during the wet. Both men and women collect mushrooms, although only women expressed interest in learning how to grow mushrooms as a livelihood activity.
- Phak Nam (a kind of aquatic edible plant)
- o Phak Dok (a kind of edible flower)
- o Phak Poun (morning glory)
- o Galinga shoots
- o Pham (Algae)
- o Bamboo
- o Rattan

7. Hunting

Some hunting is still practiced, but we were told that all of the larger animals are gone. There used to be deer and wild boar, but no longer. If they do catch animals, it is mainly mice or birds.

6. Threats to Peat and Potential Need to Restrict Access

The primary question is whether or not the current usage of Beung Paphat is harmful to the peat. Threats to peatland were partly observed by the project design mission (Dr. Quoi Le Phat), others were identified by IUCN's 2011 study (IUCN 2011:26-27).

a. Burning the Grasses in the Wetlands

Dr. Quoi Le Phat observed in his earlier investigations at Beung Kiat Ngong (the Ramsar Site) that during the dry season, villagers burned off the grasses in the wetlands. This practice is definitely harmful, and was banned in the Ramsar site. The villagers with whom we spoke in the three pilot villages said that they do not burn off the grasses in Beung Paphat.

b. Unsustainable harvest of aquatic resources, wildlife and NTFPs

This is not a major problem at the moment. However, villagers have noticed a decrease in the amount and size of fish. One solution suggested by them is to raise fish commercially in fish ponds. The threat here is the possibility of non-native fish species escaping into the wetlands during the rainy season. This can be prevented by placing screens over the fish ponds.

One additional suggestion is that during project implementation, the team should monitor the collection of aquatic resources by the villagers to determine whether or not the collection is truly sustainable.

c. Increased number of cattle

We did not observe this situation as a problem at this time. We note again, that the villagers said the cattle avoid the spongey areas, i.e. the peat, of the wetlands.

d. Insufficient human and financial resources to implement regulations and management plans

This is an on-going concern in the Lao PDR. Lao is a poor country with low human capacity. The ADB's BCC project is addressing this issue in part at many of their pilot sites by training and creating forestry patrols drawn from the villagers. During project implementation, IUCN might consider training and forming village management teams to monitor the use of the resources from the peatland.

e. Environmental and social issues associated with tourism

Currently, Community-Based Tourism (CBT) is not taking place in the villages surrounding Beung Paphat. The threat was observed among the communities to the west, around the edges of the Ramsar Site, Beung Kiat Ngong. However, the pilot villagers visited during this study all expressed an interest in developing some kind of CBT to improve their lives and CBT will undoubtedly expand to their villages in the coming years. Hence, as CBT is developed in the Beung Paphat area, it should be done with care in order to ensure that the negative impacts to the environment do not outweigh the economic benefits to the villages.

f. Changes in agricultural practices, for example, using chemical fertilizers

Again, this problem was not mentioned in the three pilot villages we visited, but, should be kept in mind during future visits.

g. Illegal encroachment into the wetlands to make more rice fields

Villagers insisted that this was not happening in the Beung Paphat wetlands.

What do villagers know already?

Villagers already have some awareness of practices which are potential threats and told us that they do not:

- 1. Burn the grasses that grow in the peat areas during the dry season. They said that they did this in the past, but the practice is now restricted. However, the implication is that some burning still occurs.
- 2. Sell the peat for fertilizer. There is no indication that villagers living around the peatlands/wetlands outside the Ramsar site are selling peat to outside companies.
- 3. Channel water from the *beung* to irrigate their rice fields. This is because rice fields are rain fed
- 4. Expand rice paddies into peat areas because of a need for more rice fields.
- 5. Engage in unsustainable fishing practices such as using electric shocks, dynamite, and poisons.

Applicability of the Standard of Involuntary Resettlement and Access Restrictions

Based upon preliminary observations, the current use patterns in and around Beung Paphat appear to be acceptable for peat protection. The ways the villagers use the *beung* are traditional, and they seem to have little harmful impact on the peat itself, even the custom of digging *loumpa*. However, full certainty will only be achieved after carrying out the peatland survey and function assessment during project implementation. For the time being there is no evidence that the project might need to restrict villagers' access to the *beung* or their use of peatland resources. For this reason the project does not trigger the IUCN Standard on Involuntary Resettlement and Access Restrictions.

Nonetheless, ongoing vigilance during project implementation is suggested, together with the formation of village teams to provide on-going monitoring of the communities' usage of the peatlands. If the peatland survey identifies the need for restrictions, the process framework guidance presented in Annex D needs to be followed.

7. Other Environmental Concerns that Emerged during the Consultation

- a. People from all three villages noted a decrease in the amount of fish they catch each year. This includes the fish which come from the *loumpa*, as well as the fish they catch and collect during the rainy season in the *beung*, and in the village of Ban Kaeng Na'ang, the fish they collect from the Xe Khampo Nampo River. Everyone attributes the decrease in fish populations to the increase in human population linked with overfishing. The overfishing is linked with the need to sell the fish to have sufficient income to support their families
- b. To address this problem, the village leader from Ban Thongxay told us that the villagers have created regulations to manage the use of Beung Paphat. He said that they did this on their own because they noticed a decrease in fish, and too many outsiders coming in to use their resources. The regulations include:
 - i. Banning electric shock fishing
 - ii. Requiring that nets must be traditional
 - iii. Banning any kind of burning in the beung
 - iv. Banning the use of chemicals or toxins to fish
 - v. Banning fishing during the spawning season, c. June July
 However, the penalty for doing this is quite weak. When asked what happens if people do
 fish during this time, the villagers responded that they give the person a warning.
 - vi. Banning fishing in the river when the river fish travel upstream to spawn. This happens in June.

- c. To address this problem, the villagers from Ban Kaeng Na'ang:
 - i. Set up a "fish" conservation area north of the shrine to Na'ang on the Xe Khampo River
- d. Suggested Cultural Recommendations to address this problem:

Other protection mechanisms could include tapping further into indigenous knowledge. Sites designated as sacred by local communities are usually treated with more respect than other community areas. The sacredness of a forest or water (stream, pond, etc.) usually serves as an indigenous protective measure. For example:

- i. Thus, the sacred aspect of Beung Paphat could be further explored with local community leaders as a potential mechanism for enhancing conservation of the natural resources they use in the peatland area.
- ii. Because they respect the site in the river where the spirit of Pi Na'ang resides, the villagers protect this location. When a Vietnamese company went to this village seeking to invest, the villagers rejected the offer of the company's representatives.
- iii. Explore the significance of "ancestral land". One of the IUCN staff observed that farmers in this area place great value on their land. He said, for example, in the Bolaven Plateau, villagers rejected an offer of outsiders to buy their peatlands. They said that this was their ancestral land, and it was not for sale. He feels that the people in this area might feel the same way. It is worth exploring and lending support to this indigenous respect for traditional land as a mechanism to safeguard the land from future investors.
- e. Decrease in the amount of rainfall due to climate change. Local officials mentioned to us that through this project, they now better understand the role that peat plays in mitigating climate change. For example, they understand that peat not only retains moisture, but that by not burning or destroying it, GHG are stored and not released. The communities are also aware of climate change and its impact on their lives. Emphasizing the importance of how peat can mitigate climate change is needed.

8. Vulnerable Groups

a. Landless Families

(1) Background

When government officials were asked whether there were landless villagers in the pilot area, the initial response was "no". However, the answer is more nuanced, and landless families definitely do exist. Each of the villages had families which were classified as "poor". There were more than one reason for this poverty, but, the reasons usually included lack of land for growing rice.

Ban Thongxay

We were told that this village has seven "poor" families. We met with six persons from these families. All the people we met were women. Land stands out as the root cause of their poverty. If they had land, the plot was very small, just sufficient for their house and a garden. In one case, a 59 year old woman, whose husband had died, lived with her nephew. But he, too, only had a small plot of land.

Three of the women we met do have not husbands (one is divorced, the other two are widows). One woman's husband lost an arm in an accident and cannot work. The two others still have husbands, but because neither the wife nor husband has land in this village, they are left without resources.

All of women collect snails, and forage for food, mushrooms, bamboo, etc. to sell and to eat. One woman estimated that she can collect 1 or 2 kilos of snails per day which she can sell for 10,000 kip

per kilo. She uses this to purchase chilies, fermented fish, perhaps some MSG. Because she lives with her nephew, he helps to support her.

It was estimated that around. 60 families in Ban Thongxay had land for rice fields. The total number of households in Ban Thongxay is 92 and the total number of families is 119. This means that only around half of the families in the village have land. Note: families from two generations often live in the same household. This explains why there are more families than households in the villages.

Ban Kaeng Na'ang

The village has 17 families classified as "poor". Five persons from these families came to meet with us, and again, all of them were women. Although the village says that it has five families headed by women, who are widows, not all of the five women we met were widows.

As in Ban Thongxay, what these families do have in common is the lack of land for rice fields. Two of the women said that they had a small plot of land which was large enough to build a house and create a small garden.

Two of the women said that they had lived in the forest for many years with their parents. One of them (now aged 61) said that she had even married someone who lived in the forest and had her children there. She said that her husband passed away when her child was only 3 years old (child is now 23 and lives in the village). Because they do not have land, they subsist by collecting snails and bamboo and other products.

The other woman who had lived in the forest with her parents was 31 years old. She married a man from Ban Kala, but neither he nor she has land for rice...just a small plot on which to build a house. She has two children, both boys. The oldest one is 15, and he goes to school. The younger boy, age 12, does not. She survives by collecting plants and snails in Beung Paphat which she sells.

A 3rd woman, aged 40, who still has a husband, married into this village from another one. Neither one of them has land. To support themselves, her husband sometimes plants rice for other families during the rainy season. He will earn 20,000 to 25,000 kip a day, and is not provided with any food when he works. She collects snails in Beung Paphat, and does some fishing.

The levels of education were uniformly low among the women we interviewed

Ban Kala

We were told by local village leaders that the village used to have more than 30 poor families, but since they received assistance from GAPE, ADB's BCC project, and SUFORD there are fewer poor families, only around 14-15. Because we only had the opportunity to visit Ban Kala for one day, there was not sufficient time to meet specifically with the poor families.

(2) Reasons for Poverty and Lack of Land

- a. When asked why they were landless, some people said that they had moved into the village too late, that the land was already taken.
- b. Others said that they had too many children, and when they divided up their existing land among their children, there was very little left. The children were left with very small plots of land, and the parents had none.

As noted above, the Land Titling process is only beginning in this area of Champasak. Presumably, the villagers only had Temporary Land Certificates. This raises the question as to whether or not during the government surveys to determine Land Titling the landless families could be granted some land. I was later told by a provincial level official that realistically this would not be possible, that land

was too limited. The most these families could hope for was a small plot of land for their house and garden.

(3) What solutions do poor families see?

The families raised the following possibilities:

- a. Being allocated land to grow rice.
- b. Having fish ponds was another. This request was mentioned by several villagers as a way to "grow" more fish in an environment where the fish population was decreasing.
- c. Raising livestock such as poultry or even pigs
- d. Technical assistance for growing mushrooms as a cash crop

(4) Recommendations

It is recommended that the IUCN Peatlands project not forget the needs of these poorer families by developing sustainable livelihood activities. As seen in the consultations with the poor families, because they are mostly landless, they rely primarily upon the resources they gather in the *beung* and the forest. This in turn raises the risk of over exploitation and unsustainable use of the peatlands.

Because the ADB's BCC project is already working in two of the three IUCN targeted villages (Ban Thongxay and Ban Kaeng Na'ang), we asked the group of poorer women why they were not part of the recipients of the ADB community income generating activities? For example, the ADB provides infrastructure (roads, schools, etc.); grants of c. USD 5,000 to form a Village Development Fund; and a rotating pig raising project. The poorer women from Ban Thongxay responded quite frankly that they were afraid of experiencing failure which led to financial obligations. For example, if they were given a pig to raise but the pig sickened and died, they were responsible to return the cost of the pig plus interest back to the project. Similarly, the Village Development Fund (VDF) loans had to be paid back with interest to the VDF committee within 6 months if the money was used to develop a small business and within one year if the money was used to buy seeds or other agriculture related activities. None of the poor families expressed a willingness to take this risk. If they failed in their endeavor, they feared they would become even poorer.

Thus, it is recommended that IUCN address the needs of these poorer families be developing activities which would provide them with a sustainable livelihood that is not dependent upon the beung/peatlands.

9. Women

From our observations, women played relatively equal roles in the daily lives of the villagers with the added responsibility of caring for the family. As seen in our consultations with both men and women about how they use the *beung*, there appears to be little division of labor between men and women in the village. Women can also own land, and inherit the family house from their parents when the parents pass away. Lao young women are just as likely, as Lao young men, to leave their village seeking better jobs elsewhere, for example, we learned about both young women and men who went to Thailand to find work and returned. Girls are expected to go to school. However, poverty can prevent them (and boys as well) from attending secondary school which is several kilometers away the villages, and, consequently more expensive. Nonetheless, on our drive to from the villages each day from Pakse, we observed numerous girls attending the secondary school which could be seen from the road. It should also be noted that Lao women traditionally have had more freedom in their choice of a marriage partner, and that this tradition continues into present times.

We should also mention that one of the important "mass" organizations in the Lao PDR is the Lao Women's Union. The Women's Union has representation which extends from the national to village level. They are a strong organization which particularly addresses the needs of women at the grass

roots level. During our consultations with the Lao communities, a village representative from the Lao Women's Union was always present, and our consultation team included the representative of the Women's Union on the provincial level.

Nonetheless, women can be vulnerable, especially if they are widowed, or landless (see above). In order to understand better the aspirations of young women in the villages, we asked three young women (all in their twenties) in Ban Kaeng Na'ang what kinds of things would enable them to improve economically. The responses included:

- a. Raising mushrooms
- b. Tailoring to make clothes to sell to other villagers
- c. Maybe raising livestock, for example ducks or chickens

Note: The parents of these three young women all have some land, and they and their husbands help the parents to grow rice. However, they all expressed the desire to be able to bring in additional income. They all have young children, and they would like to provide their children with more education.

During a small focus group conducted with women from Ban Thongxay, we asked what were their concerns and what opportunities did they seek?

- They wanted to conserve natural resources for their children
 - o They said that they would welcome a workshop on conservation
 - They know that they should rotate the ponds where they fish fish are not only decreasing, but they are getting smaller
- Need agricultural technical support for growing mushrooms and other crops, also for raising livestock
- Fish ponds
- Training on how to become tailors additional income for women
- English teacher for schools and better equipment (books, sports equipment) for teenagers
- Community fund for livestock (cows, pigs and chickens)
- Would like a doctor or nurse to visit the community on a regular schedule

10. Youth

Understanding the needs, concerns and aspirations of youth is an important part of the socio-economic and socio-cultural assessment of these three villages. Do the youth see themselves as staying in their villages, continuing to live similar lives to their parents and grandparents; do they see themselves as acquiring better education and returning to the village contributing to the life there through their improved skills; or do they envision themselves as leaving the village forever, going to larger cities in Laos or even to Thailand?

As with any group of people, the needs, concerns and aspirations are not uniform, and among the youth (between the ages of 15 and 30) we interviewed this certainly was the case.

Given the proximity of Champasak to Thailand, coupled with the similarity of Lao and Thai language and culture, I anticipated that many of the youth from this area would go to Thailand seeking a better life. I was also concerned about the possibility that many of these young people might have been trafficked to Thailand by middlemen going to their villages.

The situation was quite different from what I expected. First, among the three villages, only the youth from Ban Kaeng Na'ang were going to Thailand in larger numbers. One elder we interviewed said that many youth from the village were going, as many as 50%. Although we have no way right now of verifying this number, the out migration of youth is perceived as being very high.

Among this man's own children, his daughter had gone to Thailand to work as a domestic. She had met her husband there (also Lao), and they had eventually returned to Ban Thongxay and lived with him. His youngest child was also in Thailand. He was a monk, and was studying at a temple in Bangkok. He said that he had heard about trafficking, but that in this village, they had not had this problem. He said that most of the youth went to Thailand through family connections, and some had official documents so that they could go there to work legally. The man said that the families in Ban Kaeng Na'ang had regular contact with their children, underscoring that they are, indeed, not trafficked.

In Ban Kala, the villagers told us that only a few youth went to Thailand to work. They estimated about 12 people have gone to Thailand from the village. They emphasized that because the border is so close, sometimes people cross over to visit friends and relatives, staying a few days to a week. If they do find jobs, they send back money, but it is not very much, only 2,000 to 3,000 Baht (around USD 62 – 96) every few months. The villagers here also said that they had not seen middlemen in their village.

We were able to have a consultation with three young women and five young men in Ban Thongxay, and they told a very different story about youth traveling to Thailand. They insisted that few, if any, young people went to Thailand to find work. Another man who joined the conversation said that if people did go to Thailand, they were usually older, between the ages of 25 to 35, and were already married.

The three young women in Ban Thongxay were aged 17, 18 and 19. All of them had some education. Two of the girls had finished primary school (grades 1-5), and of these two, one had finished the 1st year of lower secondary school. The 3rd girl had not finished primary school. However, all of them expressed the desire to get more schooling, but said that their parents could not afford to send them. Ban Thongxay has a primary school, but the nearest secondary school is in Ban Kelae, about 20 minutes away by motorbike. To attend means having a motorbike, and the money needed to purchase the school books, uniform and food. All three young women expressed an interest in learning skills which would enable then to earn extra money for themselves and their families, for example, cooking or sewing. But, they also said that they would like to become teachers, and one girl said she would like to become a soldier! Only one girl specifically said that she wanted to stay in the village.

The boys ranged in age between 15 and 28. There were two young men aged 28. Neither of them had any formal education. One was from Salavan province and had married into the village. He worked as a day laborer for other families and also in his wife's family's rice fields. His dream was to become a mechanic, to learn how to fix cars. The second man who was 28 was from Ban Thongxay. He had rice fields, but, he too dreamed of becoming a mechanic.

The younger boys were aged 15,19, and 23. The 15-year-old was in the first year of lower secondary school and wanted to study mechanics. The 19-year-old, who was already in his last year of upper secondary school in Pakse, wanted to continue his studies to become an electrical engineer (?). He wanted to return to Thongxay to help develop it, and bring electricity to the village. The 23 year old was special. He was home for the weekend from Pakse where he was in his last year of university. Although he studied management and governance, his goal was to teach English in village primary school.

The concerns of the youth with whom we spoke focused on economic development for their villages, and for themselves. They did not specifically talk about preserving the environment around their villages.

B. Cambodia

Brief Timeline of Cambodian Modern History

After gaining independence from France in 1953, King Sihanouk himself was ousted in a coup in 1970 while he was in Beijing. The ensuing 5 years of civil war ended in the assumption of power by the Khmer Rouge whose leaders had been trained both in France and Beijing. The impact the turbulence and utter destruction of the Khmer Rouge period (1975-1979) had on Cambodia cannot be underestimated. Cities were emptied as entire populations were sent to the countryside to work on communal farms; and many rural populations were shifted from one part of the country to another. The objective of the new communist regime was to return to "the year zero", and to do so, all layers of familiar civilization were stripped away...government, schools, banks, private ownership of land, etc. In the process millions of people died, either through execution or through starvation and illness. Few families were spared.

By the time the Vietnamese army decided that it was time to intervene and oust the Khmer Rouge, the country was bruised and damaged. I personally was in Phnom Penh during the late 1980's when the Vietnamese-backed government was still in the process of putting the shattered pieces of Cambodia back together again. Nothing functioned...there were no public services, no electricity, no telephone, no transportation, and little food. Government offices were empty of staff, and the few government officials that were there lacked capacity. The streets of Phnom Penh lay in ruins, and most residential buildings were still empty of people. Those that had occupants were often squatters from the countryside who had no experience of urban living. The people were poor, and food was scarce.

The most recent decades of Cambodian history consists of the complete reconstruction of a country and its society. The five years of rule by the Khmer Rouge led to massive population movements, of urban people to the countryside, and often people from villages in one part of the country, to villages in another part. The post Khmer Rouge years saw another large movement of population as people tried to return to their former villages, or moved to new areas seeking a better life. Many of the people we met living in the two pilot villages, Koh Kapik and Boeung Kachhang, illustrate this internal migration. Boeung Kachhang, in fact, was uninhabited until the post-Kmer Rouge years.

It is also important to point out that since the early1990's, and especially after the first elections held in 1993 under the auspices of the UN, Cambodia's development has been inextricably linked with assistance from UN Agencies, the World Bank, ADB, international NGOS and bilateral assistance from various governments.

The two pilot villages chosen for Cambodia, Koh Kapik and Boeung Kachhang, are fishing villages in Koh Kong Province. Both of them lie within the boundary of the Peam Krasop Wildlife Sanctuary, and Koh Kapik is part of the Koh Kapit and Associated Islets Ramsar site (see figure 6). Their sociocultural background is described below in sub-section 3.a).

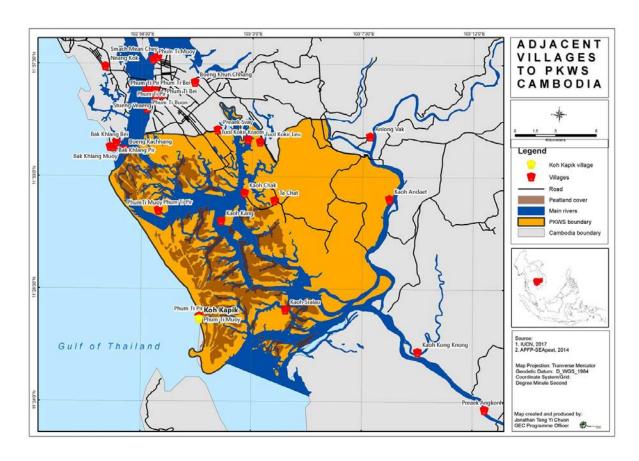


Figure 6: Project sites Koh Kapik and Boeung Kachhang Peatland within the boundary of Peam Krasop Wildlife Sanctuary (PKWS)

1. Overview of Land Policies and Rights in Cambodia and the Specific Pilot Communities

Jean-Christophe Diepart (2015:6-10) presents an excellent overview of land tenure policy in Cambodia from the traditional period through the present day. In essence, in Pre-Colonial times (before1863), all land in Cambodia belonged to the king, and farmers were the "users" of the land. The right to land, access and use, was claimed through clearing, settling on the land and cultivating it. If a farmer stopped farming his land for more than three consecutive years, he lost his *de facto* rights, and another farmer could claim the land. During this period, the decision making institution for land tenure was the household unit.

Land tenure was modernized under the French (1863-1953), and the concept of private ownership and a change in the concept of communal land property was introduced, mainly as Diepart says (2015:8) to stimulate rice production. This period saw the shift from land being a "possession right" to an "ownership right". Land titling which required land registration was instituted, and records and documents were kept for the first time. The French also instituted forest administration and also concessions and plantations. These changes took land away from the farmers and kept people out of the forests.

During King Sihanouk's reign (1953-1970), the system of land tenure did not change significantly from what it was under the French. The next major shift in land tenure happened when the Khmer Rouge assumed control in 1975. During the Khmer Rouge period (1975-1979), private land ownership was abolished, and all cadastral documents were destroyed (Oldenburg and Neef 2013:2). However,

even when the Vietnamese intervened, and installed a Vietnamese-backed government in Phnom Penh, the land still belonged to the State. It was only in the late 1980's that collectivization ended.

However, it was not until the new Land Law of 2001 that real reform, with the assistance of the international donor community, began. Land was classified into five domains: (i) private; (ii) monastery; (iii) Indigenous land; (iv) state private land (mostly forested areas); and (v) state public land (land that can be converted into various forms of concessions). These concessions have created serious problems and conflicts, and, as Oldenburg and Neef (2013: 2) note: "to date, no clear demarcation between state public and state private land exists. Most state private land has been allocated to domestic and foreign investors in the form of Economic Land Concessions (ELCs).

2. Land Policy for the Target Villages

The target villages, Koh Kapik and Boeung Kachhang, lie within the boundary of the Peam Krasop Wildlife Sanctuary (PKWS). The land within the sanctuary belongs to and is under the administration of Ministry of Environment (MOE). The sanctuary was created in 1993 by royal decree from King Sihanouk and the people living within the sanctuary were granted permission by the King to stay there. The sanctuary occupies 23,570 ha. In 1999, Koh Kapik and associated islets were further designated as a Ramsar Site within the PKWS. The total area is 12,000 ha.

In order to manage the area, as well as to resolve conflicts between communities who live inside the wildlife sanctuary and those who manage it, four zones, as outlined in Cambodia's Protected Area Law (2008), were designated (with the assistance from IUCN) in 2011 under a sub-decree from the Prime Minister Hun Sen.

The four zones created inside the boundaries of the PKWS are:

- 1. **Community Zone** this is the zone in which people can build their houses, have agricultural fields and gardens and develop other activities.
- 2. Sustainable Use Zone within this zone people were able to establish their own Community Protected Areas which they managed themselves. They were permitted to use these zones in traditional ways, but also expected conserve them. They could collect NTFPs, for example, and also develop eco-tourism. The communities set the regulations themselves, but under the supervision of the DoE, and the Director of the PKWS. (Note: 6 Community Protected Areas have been created in the Sustainable Use Zones within the PKWS.
- 3. Conservation Zone this is an area of high conservation value containing natural resources, ecosystems, watershed areas, and natural landscape adjacent to the core zone. Small scale community use can be permitted (collecting NTFPs, for example) under strict control. According to the 2008 Protected Area Law, regulations are supervised by the Nature Conservation and Protection Administration which is under the MoE.
- 4. **Core Zone** a totally protected area in which no activities can be carried out².

It is important to note that the four zones in PKWS were created before there was any awareness of protecting and safeguarding peat from the national down to the community level.

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² Under the 2008 Protected Area Law, Chapter II, the Nature Protection and Conservation Administration (NPCA) is designated to manage the protected areas (PA) in Cambodia. As part of their duties and responsibilities they have the right and duty to: (i) regularly patrol, control and crack down on national resource offences in PA; (ii) inspect licenses, permits and other relevant documents; (iii) take action against forest fires in PA; (iv) control export and import of wild flora and fauna in PA; and (v) promote education and dissemination among the public, and coordinate with local indigenous communities. Chapters IX and X of the 2008 Protected Area Law treat law enforcement and penalties issues. Chapter IX, entitled Law Enforcement and Procedures to Resolve Offences, designates the officials of the NPCA as the judicial police officers with the duties and authority to investigate, prevent and crack down on natural resource offences within their assigned territory and to file such cases with the court. Chapter X, Natural Resource Offenses and Penalties, lists the various offenses for PA together with the fines and punishments for each one.

3. Socio-Cultural Background

a. General Background

The two pilot villages chosen for Cambodia, Koh Kapik and Boeung Kachhang, are fishing villages, and as such differ from inland Cambodian rural villages. The latter are more similar with Lao rural villages. The Cambodian inland rural villagers rely on integrated agricultural systems of wet rice paddy fields combined with small gardens and foraging in the forests for wild plants and vegetables. Fishing is a supplementary activity, and is usually done in freshwater sources, namely streams and rivers.

Koh Kapik and Boeung Kachhang villages are different. They are typical coastal fishing villages where villagers do not grow rice, but depend on catching and selling fish and other marine and mangrove resources to earn enough money to buy rice. Although all ethnic Khmer are Theravada Buddhists, they also believe in a number of pre-Buddhist spirits who inhabit their villages and environment. The coastal villagers have a set of pre-Buddhist spirits who are closely linked with the sea. They are the ones who protect fishers from harm when fishing out in the open sea. Some of the spirits are common to most of the fisher villages in the Koh Kong area, Yeah Mao, for example, but others are more localized and particular to one or a few villages. Koh Kapik has two such spirits, Yeah Tip and Po Lim Tam, neither of whom is found in Boeung Kachhang.

All Cambodians speak Khmer, a Mon-Khmer language that is part of the larger Austroasiatic linguistic family. Although it is a language that is completely different from Thai, there are many Khmer loan words found in Thai. Also, as noted above, many of the Cambodians who live in Koh Kong, because of the area's long historical connections with Siam/Thailand, also speak fluent Thai.

b. The Cham

Koh Kong Province also has a number of Cham communities, and although most Cham live in communities with other Cham, a few families live in villages together with Khmer. Small numbers of Cham families live in both target villages. Koh Kapik has two Cham families who moved there in 2009, and Boeung Kachhang has three.

The Cham can be considered a distinct ethnic group living in Cambodia, and they retain a linguistic (they speak an Austronesian language) and cultural identity separate from their Khmer neighbors. Their historical homeland is southern Vietnam where they formed part of a civilization called Champa. According to historical records, when Cham Kingdom collapsed in the 15th century, the Cham fled, some to Cambodia. The Cham prefer to live along waterways and coastal areas where their primary economic activity is fishing mixed with cultivation of rice and cash crops.

One of the main cultural traits distinguishing the Cham is that they are Muslim. Cham villages have mosques, and the Cham practice what seems to more moderate form of Islam. They attend the mosque on Fridays, do not eat pork, and observe Ramadan. Cham are easily distinguishable by their dress. Adult women often wear some form of headscarf, and dress modestly. Men wear a turban or scarf around their head, and also sometimes a white cap, During the Khmer Rouge period, Cham were specifically targeted by the brutal regime. Urban Cham received the harshest treatment, and many were executed during this period.

There is a large Cham village on the road leading to Peam Krasop Wildlife Sanctuary, known simply as Village #4. Although we did not stop at this village, we observed that the village had two mosques and a population that dressed in Cham traditional fashion. As just noted, a few Cham families live in Koh Kapik and Boeung Kachhang. We later learned that the families in Boeung Kachhang came to the village via Village #4, and that they still went to the mosque in Village #4 each Friday. It is noted, at least in Boeng Kachhang, that the three Cham families live in a small cluster quite a distance away from the main settlement, suggesting that they might have been marginalized culturally and socially.

c. Applicability of the Standard on Indigenous Peoples

Two Cham families live in Koh Kapik and three Cham families in Boeung Kachhang, Koh Kong Province. The Cham are not recognized as indigenous by the Cambodian government. Technically, they are not "indigenous" to Cambodia because they arrived from Vietnam during the 15th century. However, although not recognized as "indigenous" in Cambodia, according to criteria 3 of IUCN's definition of Indigenous People³ the Cham could be classified as indigenous.

In Boeung Kachhang, the Cham currently reside outside the core area of the village. Their presence in both of the pilot villages in Cambodia could trigger the ESMS Standard on Indigenous Peoples. However, after a deeper look at the Cham families living in one of the pilot sites, the consultant concludes that their situation does not differ significantly from other poor Khmer families living at the site, and that their distinctive culture is not under threat from the proposed project. Hence, it is suggested that the Standard on Indigenous Peoples is not triggered and an ESMP or IPP is not needed.

4. Socio-Economic Analysis of the Villagers Living in the two Pilot Villages

As noted above, both Koh Kapik and Boeung Kachhang are small islands that are part of the Peam Krasop Wildlife Sanctuary created in 1993. Koh Kapik, together with associated islets, was designated a Ramsar Site in 1999. The area constitutes a unique and distinctive mix of coastal and mangrove ecosystems. The recent discovery and awareness of the presence of peatlands within the mangrove areas is exciting for scientists, and makes the peatlands in this part of Cambodia even more unique.

The island of Koh Kapik consists of two villages, Village 1 and Village 2. Because the administrative buildings, including the Communal Hall, are in Village 1, we held our village consultation in the Communal Hall in Village 1. However, villagers from both Villages 1 and 2 participated in the two days of consultations. For simplicity's sake, I will usually just refer to Koh Kapik, but with the understanding that it means both Villages 1 and 2. To walk from Village 1 to Village 2 takes about 30 minutes, to travel by bicycle about 15 minutes and by motorbike 10 minutes.⁴

Although the histories of the Koh Kapik and Boeung Kachhang differ (see boxes), they share a common way of life. The majority of the villagers rely on sea, coastal and mangrove resources. A minority of persons in each village engage in other activities, many of which are linked with the marine resources. For example, in both villages there are middlemen who purchase the fish, crabs, shrimp and mussels from the people who catch them, and sell the products to Koh Kong City or elsewhere.

Both villages are poor, but, Koh Kapik is noticeably poorer than Boeung Kachhang. The reason for this derives in part from Koh Kapik's history (see box) and its relative remoteness. Traveling to Koh

³ Criteria 3: Traditional peoples not necessarily called indigenous or tribal, but who

Share the same characteristics of social, cultural and economic conditions that distinguish them from other sections

⁽II) Whose status is regulated wholly or partially by their own customs or traditions, and

⁽III) Whose livelihoods are closely connected to ecosystems and their goods and services.

⁴ We should note should that four villagers from Koh Sralaok also attended the consultation. This is a separate island/village which is one of the three villages forming the Koh Kapik Commune. The island is about 10 kilometers from Koh Kapik by boat (we passed it on our way from Peam Krasop, our point of departure from the mainland, to Koh Kapik). The island has uplands, peatlands and a supply of fresh water. The villagers grow a wide variety of fruits and other cash crops, including: bananas, pineapples, palm, sugar cane, jackfruit, potatoes, corn, rambutan and cashews. Inviting the villagers from this village to attend the consultation was a way of informing them of the upcoming project. Although there is currently no funding to include them in the community income generating activities, it is hoped that they could participate in peat awareness raising workshops that will be conducted as part of the project.

Kapik by speedboat takes a minimum of 1 hour if the boat travels through the mangrove waterways, and 30 to 40 minutes if the speedboat travels mostly via the open sea. Traveling by regular boat could take up to two hours. However, both villages experience serious difficulties with the availability of fresh water, and neither village has electricity.

Boeung Kachhang already has solar panels, and is more likely to be hooked up to the mainland's electricity grid in the future than Kokh Kapik because of its proximity to the mainland. Note: Boeung Kachhang faces Bak Klang, the Commune seat which is less than a 10 minute boat ride away. Few people interviewed believe that Koh Kapik will get electricity any time in the near future. We did not observe any solar panels in Koh Kapik. Those families that do have electricity rely on generators.

In general, the people living in Boeung Kachhang appear to have better living conditions. Although life was quite difficult when the families first moved to this island, by today, they seem more prosperous. This is, in part due to the community's diversified economy. Not only do they collect the usual marine resources such as fish, crabs, shrimp and mussels, a few families have a lucrative fish pond business raising seabass which they sell to Thailand. The net income from this business averages around USD 3000 per year. Because of their proximity to the mainland, many of the youth in the village commute each day to work in foreign owned factories, receiving steady salaries.

With regard to education, Both Village 1 and Village 2 on Koh Kapik have primary schools. However, sending children to secondary school is problematic. The nearest secondary school is on Koh Sralaok which, as noted in footnote 4, is 10 km away, and can only be reached by boat. Villagers said that it takes about 1 hour to go there. There is no dormitory at the school, so unless other arrangements are made, the children have to travel back and forth each day.

Because of Boeung Kachhang's proximity to the mainland, their children can easily travel the distance to the secondary school in Bak Klang each morning. Because of its better economy, the leaders in Boeung Kachhang have plans to build a secondary school.

Although there is a health center in Village 1 on Koh Kapik, it was never open during the visits we made to the island. According to our interviews, there is both a nurse and doctor living in Village 2 on the island. Villagers living on Boeung Kachhang have to travel to the mainland to the health center in Baklang. However, like the plans to build a secondary school on the island, the local leaders also have plans for their own health clinic. With regard to land ownership, the situation is pretty much the same. Most families living on both islands can only own a small plot of land large enough for their house and a garden, nothing more. Boeung Kachhang's plans to build a temple, school and health center are on community land. Plans need approval from PKWS officials and the DoE.

Another reason for Boeung Kachhang's relative prosperity is the large number of international projects which have conducted income generating activities in their village, and the overall higher capacity and commitment of the villagers.

Culture and History of Koh Kapik, Ko Kapik Commune

Koh Kapik has an interesting history linking it with both Thailand and the French Colonial period. From 1895 – 1904 the area of Koh Kong was under Siamese administration under the reign of King Mongkut. In 1904, the Koh Kong area, as well as Trat, was ceded to the French. However, in 1907, Trat was returned to Siam in exchange for another piece of land under Siamese control. Koh Kong remained under French control until the period of French of rule ended in 1953.

The current island of Koh Kapik, originally called Koh Kong, was the seat of French administration for this area. The small adjacent island of Koh Moul, was the physical location for the administrative center, and we were told that ruins of French buildings can be seen there today. We were unable, due to the short period of time spent at Koh Kapik, to visit Koh Moul. Koh Moul is said to not only have housed the administrative quarters, but also the residences of the French who lived there. They said that there was a swimming pool on this small island. The island also has a supply of fresh water which is still collected by villagers. However, it dries up during the dry season. The name of the small island, Koh Moul, appears to be a mixture of Thai and French. Koh means "island" in Thai, and Moul is most likely a corruption of moules which means mussel or mollusk in French. Local people today still go to this island to collect small oysters.

The island today is a remote backwater, but during earlier periods of history, it was an important port and center of trade. Because of its history together with ongoing current frequent exchanges with Thailand, the people living in these villages speak Thai. Interesting, during the period of the reign of King Norodom Sihanouk (1953 – 1970), in order to integrate the islands more into Cambodia, it was illegal to speak Thai. Apparently, people were fined 50 riels for each Thai word they used (if caught).

Elders on the island confirmed that that in the past, many people lived in the area and there was a thriving trade with Thailand. However, by the end of the Khmer Rouge period, the area was underpopulated, and trade with Thailand had been cut off. The original seat of Koh Kong (on Koh Moul) moved to Koh Kong City around 1979 – 1980.

Although most of the villagers still maintained close relations with Thailand, and fish was once again traded with Thailand, it was not the flourishing center of trade that it had been in the past.



Figure 7: Natural and Cultural Resource Map for Koh Kapik drawn by villagers

Statistics:

Population Village #1: 371 (185 female) Population Village #2: 1,215 (711 female)

HH Village #1: 71 HH Village #2: 318

Temple: 1

Number of monks: 4

Shrines: 3

Primary Schools - two

Teachers for School in Village #1: 4 (1 female) Teachers for School in Village #2: 4 (1 female) Number of Students Village #1: 93 (50 female) Number of Students Village #2: 158 (86 female)

Health Center in Village #1, but the nurse and one doctor live in Village #2. Cham Families: 2 (only moved to Koh Kapik around 2009, and live in Village #).

In 2013 a relatively in-depth socio-ecological survey was conducted in five villages in the Peam Krasop Wildlife Sanctuary by two IUCN staff together with one official from the MoE, one from the DoE and two PKWS staff. As part of this survey, the team spent 10-days in Boeung Kachhang where they carried out their survey using semi-structured interviews and participatory rural appraisal tools. Because their report on Boeung Kachhang is quite extensive (Sun Kong and Lou Vanny 2013), this report's objective is to supplement their findings, especially with regard to the use of peatlands, and to conduct interviews with the Cham families living on the island.

As noted above, and as seen in the village maps, both the villages have mixed economies which rely predominantly on collecting and gathering marine and mangrove resources. Both men and women collect marine and mangrove products throughout the year from different parts of their respective islands. The majority of resources that are collected from the mangroves, such as crabs, frogs, oysters, and clams, are collected by both men and women. It is mostly men, however, who do fishing

and collecting in the open seas. A few women from Koh Kapik said that they sometimes accompany their husbands, but the majority of women do not.

Families in both villages also have small gardens in which they grew items such as chilies, eggplant, onions, etc. Some families also had fruit trees, for example, coconuts, mangos and bananas. In Koh Kapik, five or six families have small coconut plantations. Note that fruit trees are considered private property, and the fruit is sold in the village or perhaps elsewhere.

In both Koh Kapik and Boeung Kachhang, there are small shop owners, middlemen for transferring the products from the source to the market (there are both men and women middlemen), day laborers such as people who peel shrimp and crab for others or who work on other peoples' fishing boats, as well as a small number of people who are teachers, health specialists, and government administrators. It was noted that three men in Koh Kapik had construction skills and built houses and boats for other people in the village. Approximately 10 households in Koh Kapik run small shops in the villages. They get their supplies from Koh Kong City.

Both villages also have "shrimp" farms which are privately owned and controlled by the families who owned them. Note that the "shrimp" farms are actually crab farms. Shrimp is only collected in the open seas.

History of Boeung Kachhang, Bak Klang Commune

Boeng Kachhang is much less remote than Koh Kapik. Bak Klang, the commune seat can be reached by car from Koh Kong City, and the island itself is only a short (7 minute) motorboat trip.

There is an interesting story to the origin of the name Boeung Kachhang. Boeung is a Khmer word for "lake" and "chhang" comes from the Thai word for elephant. Ka refers to "wedding". The village was only officially founded in 1982, and at the time was simply called "Village #6". It remained as Village #6 until around 1985 when it was changed because of a local story about the island. People believed that a long time ago elephants used to swim across the channel from the mainland to the island. This was because the island had a fresh water lake and mango trees. The elephants supposedly enjoyed swimming in the fresh water lake and eating the mangos, and it was likened to an "elephant wedding". Liking the story, the name was officially changed to Boeung Kachhang.

We learned from one of the original settlers on the island, that the island was originally uninhabited. Families only moved here after the Khmer Rouge period at a time when the government was promoting the Koh Kong area as a place to live. Thus, literally everyone on the island is an immigrant. Most of the families come from Takeo and Kampot provinces with other families coming from Sihanoukville. Some came from as far away as Preah Vihear Province. Both Kampot and Sihanoukville are coastal, fishing areas. Takeo is an inland province, as is Preah Vihear.



Figure 8: Three-Dimensional Map of Boeung Kachhang Created by the villagers

Statistics:

Population Households: 121

Primary School - 1

Teachers: 4 (two men and two women) Number of students: 87 (32 female)

Health Center – 0 (villagers use the health center in Bak Klang)

Temple – 0 (people go across the water to the mainland to go to the vat; however, it was noted

that future plans included building their own temple in their village.

3 Cham Households

5. Peat Areas on Koh Kapik and Boeung Kachhang

The situation of peat on these two islands differs greatly from the peatlands in southern Laos. In southern Laos the peatlands are concentrated in established wetlands. In the PKWS, the peat is distributed widely, not only among the mangrove swamps, but also on the islands.

As noted above, both the PKWS and the Ramsar site were zoned and its regulations set up before local authorities were aware of peat and the importance of its preservation. As a result, peatlands are not factored into the management plan for PKWS. This factor is especially relevant with regard to the Community Use and Sustainable Use Zones.

Peat expert, Dr. Quoi Le Phat, conducted preliminary surveys in the PKWS, and has identified extensive areas that are definitely peat, or potential peatlands (2012 and 2015) (see figure 6). A large number of them have been identified in and around Koh Kapik and Boeung Kachhang, the two pilot sites. However, due to the lack of clear maps relating these zones to the peat areas, it is unclear whether or not these peat areas are found within the Community Zones and Sustainable Use Zones. These areas, as noted above, were zoned before peat was taken into consideration, and as a result

are zones in which human activity and usage are permitted by the Kingdom of Cambodia's Protected Area Law (2008). A non-scientific visual assessment by the team seems to confirm that there are peat layers everywhere in both of the pilot villages, in Koh Kapik and Boeung Kachhang. In Boeung Kachhang in particular, it is quite possible that people's houses and other community structures, such as the primary school, are sitting on top of peatlands.

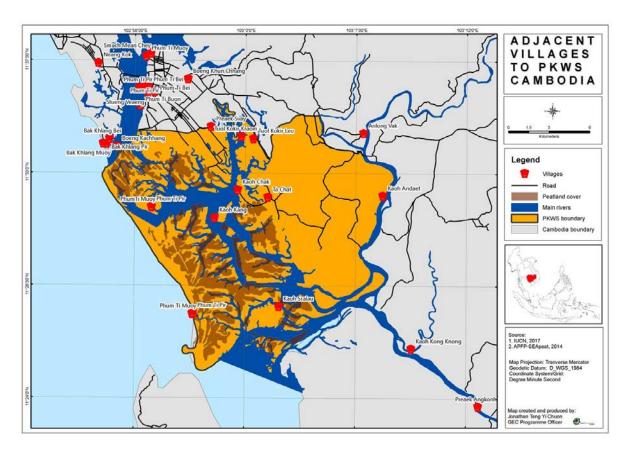


Figure 9: Map showing potential peat cover in coastal wetlands, Koh Kong province

6. What do the villagers know about peat, where is it, and how do they use it?

As noted above in Section V, *dey momouk* dey *momouk* is the term used by the MoE, DoE and IUCN staff for peat. However, group discussions in both villages revealed that the local villagers are still unclear about what is and is not peat, and why it is important.

a. In Koh Kapik

After the Deputy Director DoE provided an explanation of what is peat and why it is important to the villagers gathered in Koh Kapik, we asked them how they used peat. We received a mixed response. Although most of the villagers said that they believed they used peat, mostly in small quantities as organic fertilizer, one man said that peat was a new word for him, and he was not completely clear about what it is. He said that he only knew about a certain kind of "mud" that was good for agriculture. A woman in the group responded that she did not really know much about peat, and that she did not know how to use it.

Using the maps drawn by themselves, the villagers indicated the areas which they thought were peat. One area is in the southeastern part of the island, surrounding a fresh water pond. The pond sits between two mangrove areas. They said that there was also peat in the northeastern quadrant of the

island, in an area where there had been mangrove restoration, and then, also along the northwestern coast of the island in a mangrove area.

Activity	January	February	March	April	May	June	July	August	September	October	November	Decembe
Selling rice, noodles and other food												
Crab and frog collecting (north-eastern area)												
Forest mangrove snail collecting												
Crab paste (kah phi) is collected												
Crab paste is sold												
Oyster shucking and collecting												
Long crab legs are collected and sold												
Shrimp peeling												
Chicken raising												
Small potted gardens with eggplant												
morning glory, garlic and lemon grass												
Household management/maintenance												
Green mussel collecting, harvesting, selling												
Shrimp collecting												
Setting crab traps												
Black crab collecting												
Blue swimming crab collecting (at sea)												
Crab raising												
Teaching at the local school												
Chinese New Year celebrations												

Key				
Women				
Men				
Shared Activity				

Figure 10: Seasonal Calendar Koh Kapik, Koh Kong province, Cambodia, collected May 23-24, 2017

When asked if they used the peat (*dey momouk*) in these areas, the villagers said that they went into the areas with peat mainly to collect aquatic resources, namely to fish, collect crabs, etc. They said that they did not go specifically to collect the peat. Nor, did outsiders come in to collect the peat.

b. In Boeung Kachhang

After the Deputy Director, DoE, and the IUCN Cambodian staff member introduced why "peat" (*dey momouk*) is important, the villagers were asked if they knew about peat. Only a few villagers responded that they had an idea of what is peat, and why it is important.

When the villagers were asked where the peat is on the island, they used the 3-Dimensional map they had made to point out where peat is found. They said it is only found in a few areas, for example:

- 1. Very close to the sandy beach (along the southeastern edge of the island) that has been identified as a potential eco-tourism site;
- 2. Around the school,
- 3. On the north side of the island; and

When asked if they use the peat, and how, the villagers responded that they do not use the peat, that the soil is too soft. In reality, according to our colleagues from IUCN, DoE and PKWS, there is peat everywhere on the island, and it is being used all of the time, for example, as fertilizer for the coconut trees or the mangrove nurseries.

Activity	January	February	March	April	May	June	July	August	September	October	November	December
Blue swimming crab collecting and selling												
Factory working (8 men and 25 women)												
Buy fishing products (three women)												
Collect recycling, mangrove snails and mussels within the CPA												
Mud crab collecting												
Blue crab collecting												
Shrimp peeling												
Shrimp drying												
Fishing (using a pole)												
Household management/maintenance												
Community savings group management (86 men and women)												
Crab, shrimp and eel night fishing in CPA												
Crab, shrimp and eel cooking and selling												
Local boat taxi												
Government staff												
Play football and volleyball												
Hospital volunteer liaison												
Sea bass and crab raising (17 HH)												
Chicken and duck raising												
Chum Boun Dai 15-day ceremony												
Khemer New Year												
Village ceremony												
Water festival boat races												
Key Women Men Shared Activity												

Figure 11: Seasonal Calendar Boeng Kachang, Koh Kong province, Cambodia, collected May 25-26, 2017

Interestingly, at the end of the second day of our community consultation in Boeung Kachhang, one of the younger women with whom we were speaking, asked us why we were so concerned about this kind of soil called peat. This question indicates that at the end of two days of consultation, some villagers were still unclear what is peat, and why it is important.

7. Threats to the Peat and Potential Need for Access Restrictions

a. Charcoal Production

One of the former primary economic threats to the peat and the mangrove area has been the charcoal production which burned and destroyed the mangroves to make charcoal. Although this was a lucrative business, it destroyed the mangrove swamps in the area, and had a serious impact on the marine resources in the area. We know now that this burning also burned peat.

This activity was banned after the wildlife sanctuary was set up in 1993. Initially, the families who relied on the charcoal industry for their livelihood resisted, complaining to the authorities that they were losing their livelihood. In exchange for replanting the mangroves and protecting those that remained, the government did provide some compensation. Once the mangroves were restored, the amount of marine resources increased, and communities were then able to rely on fishing and collecting marine resources for their livelihoods. Based upon the work of the DoE, the charcoal production is no longer a serious threat.

b. Sand Dredging

The sand dredging threat is particularly serious in Koh Sra Lao, the island noted above in FN 1. Koh Sra Lao was identified by Dr. Quoi Le Phat as a peat-rich area. The island has been at the center of a sand dredging controversy for several years. Sand dredging was reported to the authorities in mid-2016 by Mother Nature, a Spanish-led NGO (The Phnom Penh Post June 27, 2016). According to the article, sand dredging and its export were banned by the Prime Minister Hun Sen in 2009, but dredging licenses were still being issued by the Ministry of Mines and Energy as recently as spring 2015. There have been protests by villagers against the two companies (both Cambodian companies)

who do not want the companies dredging sand from their beaches which are part of the PKWS. A moratorium was placed on sand dredging by the government at this time, and it seems to have been stopped at this time. However, sources indicate that it is possible the threat will return. A Radio Free Asia report dated to 5 May 2017 mentions sand dredging activities being carried out by a Taiwanese company in Stung Have District Town, Preah Sihanouk Province.

Fortunately, villagers on both Koh Kapik and Boeung Kachhang said that there was no sand dredging on their islands, but it is good to highlight local perceptions about the side impacts from the sand dredging from several people from both villages.

c. Current Usage of Peat Areas

Using traditional methods to collect marine resources in the mangrove swamps (and hence possibly peat areas) does not seem to be a serious problem for peat conservation. However, in order to evaluate the impact in detail, the project team will have to know whether or not there is substantial peatlands within the Community and Sustainable Use Zones on the islands, especially on Boeung Kachhang.

Human activities are permitted in these zones, for example families construct their houses as well as have gardens in the Community Use Zones. Activities in the Sustainable Use Zones usually entails collecting marine resources such as crabs, mollusks, and along the eastern edge of Boeung Kachhang island are mangroves which can be used for harvesting wood needed to build houses. In the northeast quadrant of their village map, village leaders have designed a master plan to build a temple, a health center and additional houses for people on the island who do not have land. In addition, they have a plan to open up a water channel connecting the northeastern part of the island (where most of the community residences are concentrated) with the southwestern part of the island. This channel will cut through the island's Community Protected Area which is part of the Sustainable Use Zone.

d. Applicability of the Standard on Involuntary Resettlement and Access Restrictions

Because peat was not taken into consideration when this island was zoned, the peat surveys, which will be carried out at the beginning of the project, are critical. If substantial peatlands are found in the Community and the Sustainable Use Zones, it will be necessary to determine whether there are any current activities that should be restricted in order to protect the peat (e.g. housing, harvesting marine or forest resources). This would trigger the ESMS Standard on Involuntary Resettlement and Access Restrictions, and will imply that communities will need to be consulted following Free, Prior and Informed Consent (FPIC). In light of this possibility, Annex D provides elements of a Process Framework describing the process to identify and assess potential social impacts, together with affected groups, and develop measures to mitigate impacts (see Annex D). This guidance needs to be followed if the project promote restrictions.

d. Recommendations

From these consultations, it is clear that most villagers do not understand what peat is, nor do they understand why it is important, and as a result they use it. In order to resolve this problem, IUCN needs to undertake the following activities:

- 1. Make a clear and accurate map which contain the following elements:
 - a. Boundary of the PKWS
 - b. The four zones within the PKWS
 - c. Boundary of the Ramsar Site within the PKWS
 - d. The villages within the PKWS with their names
 - e. The Community Protected Areas within the Sustainable Use Zone
 - f. And, most important the location of both the peat and potential areas

Maps should be made for the entire PKWS/Ramsar Site area, and then, separate maps should be drawn for each of the pilot villages also indicating these six elements.

- 2. Design awareness raising and educational materials. Before the project can move forward, it is necessary for all of the communities:
 - a. to know what is peat,
 - b. to be able to distinguish it from other kinds of soils in the wetlands, and
 - c. to know why it is important to protect (not just globally, but for them personally)

Only then can the communities participate meaningfully in a discussion about the ways they currently use or do not use peat, and work with local authorities and IUCN to develop a management plan.

8. What changes have the villagers observed in the environment over the past 10 years?

There was a disagreement among the women of Koh Kapik as to whether or not the marine and mangrove resources had increased or decreased. Because of the mangrove restoration project, many of the resources in the mangroves had increased. However, others said that fish had decreased.

The men reinforced this opinion, saying that the mangrove restoration had increased the mangrove resources. However, fish had decreased on the open sea. They speculated that this was due to an increase in the numbers of fishers together with improved fishing technology, so that more fish are collected. They said that sometimes boats from Thailand come into their territory, but not too many.

9. Women

Underscoring the economic differences between the two villages, a similar difference was observed between the women in Koh Kapik and the women in Boeung Kachhang.

In Koh Kapik, only six women participated in the community discussions out of a total of 25 people, whereas in Boeung Kachhang, there were only three men in the group out of 18 people on the first day.

In Koh Kapik, there was only one woman among the seven members of the Community Protected Area Committee whereas in Boeung Kachhang many, many women were members. When women were asked in Koh Kapik why they were not members, they said that they did not have the knowledge to be members, or were too busy taking care of the family. More proactive work is needed to involve these women in the protected areas.

a. Concerns of Women in Koh Kapik

The following are concerns expressed by women during the consultations:

- They are worried about land, that they do not have enough property
- They don't have enough money to take care of the sick and the elderly.
- They are aware that there are fewer and fewer fish...they don't understand why. Some say that they have noticed that there are more storms than before, and when there are storms, the men cannot go out to fish.
- They are worried about the lack of fresh water. In the dry season, there is no fresh water anywhere, even the source of fresh water on Koh Moul dries up. They also complained that the large basins for collecting rain water provided by other projects were of poor quality, and that many of them have broken. Lack of fresh water is a big problem.

b. What would women of Koh Kapik see as solution?

The following are solutions to their problems voiced during the consultations:

- Solution to the fresh water problem
- Electricity
- Help with their failed Savings Group

We learned that about 7 to 8 years ago, the international organization CZN helped the women on Koh Kapik set up a Savings Group. However, despite the assistance, the group failed. The women agreed that the structure of the group was not good, and the regulations not sufficient. They all said that they would like to set up a Savings Group again, and as part of the assistance, to have better regulations and better capacity building.

Borrowing money from elsewhere is expensive (higher interest rate). They like the idea of a Savings Group more than micro-finance projects because with micro finance they have to have collateral.

The women in Boeung Kachhang seemed more prosperous, more outgoing and confident.

10. Vulnerable Groups

a. Cham Families on Boeung Kachhang

(1) Background

The three Cham families live on the beach area along the southwestern edge of the island. There were four houses in the small residential cluster, but only three of them belonged to Cham families.

The three Cham families living here are all related. We first spoke with a young woman, Ms. M, approximately 30 years old, who lived in the small house with her husband and 4 young children. She was the most recent arrival, having moved to the island about 10 years ago (c. 2007). She said that she moved her family here to be with her parents who, in turn had moved here to be with her mother's sister (i.e. this woman's aunt). While we were talking, her aunt came over and agreed to talk with us as well. The husband of Ms. M was outside fishing.

Like everyone else on Boeung Kachhang, the Cham families are migrants from other parts of Cambodia. The first member of the extended (matrilineal) family to arrive was the aunt. The aunt and her family originally lived in Ville Rean in Sihanoukville. We were told that many Cham families lived in Ville Rean. Ville Rean is not on the coast, so although families living there did go to the coast for fishing, they also had rice fields. The aunt had not attended even primary school, and was illiterate. She said that her mother was left a widow after the Pol Pot/Khmer Rouge period.

We also learned in an earlier interview with an elder from Boeung Kachhang that Ville Rean was one of the places designated by the Khmer Rouge to send coastal, fishing people during the Khmer Rouge period...where they were forced to grow rice for the regime.

The aunt explained that around 21 years ago (would have been c. 1995-96) she and her husband found themselves without land, without rice fields. They first moved to Village #4 (A Cham village described above...located just outside Koh Kong City on the road to Peam Krasop). Then, 6 years later, the family relocated to Boeung Kachhang (c. 2001-2). They heard that crab fishing was good on this island.

Ms. M's parents were the next to move to Boeung Kachhang, around 15 years ago (around 2001-2002), in order to with the aunt (Ms. M's mother's sister). She said that her parents moved directly to the island from Ville Rean.

The family is culturally Muslim. In terms of dress, for example, Ms. M wore a scarf wrapped around her hair – although her older aunt did not. The family travels by boat across the channel to Village 4 every Friday to attend prayers at one of the mosques. However, neither she nor her husband did daily prayers in the house. Ramadan had begun the day before our visit, and Ms. M said that she was observing the month-long fast. Although her husband cannot read the Quran, she said that her father could, that he had learned to read Arabic in Ville Rean.

(2) Socio-Economic Situation of the Cham Families

All of the three families depend on the sea and the mangroves for their subsistence. Ms. M's husband is a fisher, and depending on the weather, he either goes to the open sea or to the mangroves to fish. He uses nets. She said that her own father sometimes still goes out to fish, but because he is old, he goes out only a few days each month. Sometimes her husband shares his catch with her parents. She said that both her father and her aunt's husband, because they are both old, will collect plastic and other kinds of rubbish on the beach. They can sell this for a small amount of money.

Ms. M herself collects mangrove snails and mussels. She used to collect crabs from the mangroves, but because her two twin daughters are only 4, and her youngest son is around 3, she needs to stay at home more to care for them. They estimate that they sell 80% of what they collect, and keep 20% for personal consumption. They also raise chickens, and at the moment they have two chickens plus about 20 little chicks.

Although the three families are physically separated from the main part of the village, they still play a role in village activities. For example, they know about the area just north of CPA near the village where houses, a temple, and health center are being planned by village leaders. She says that the land on which they have their house now is not their land, and that when the new channel is dug connecting the main part of the village with the beach area, they will move there. Mr. Rith, school principle and head of the CPA, installed a loudspeaker system which reaches them. Thus, they are informed about village meetings and other activities and can attend.

The aunt may not have had any education, but she seemed quite astute. She is a member of both the CPA committee (Ms. M is not), and the Savings Group, which she joined about 3 to 5 years ago (again, Ms. M is not). The aunt is quite pleased with the Savings Group, and regards it as a kind of security. She said that she puts in c. 5,000 or 10,000 riels (about 1.25-2.5USD) per month. She knows that she can borrow from the group for making a new livelihood, or she can simply leave it there to grow and withdraw it if she wants to travel or if she needs it for her sons and daughters.

A note on her sons and daughters – the aunt bore 11 children, 6 of whom still live with her and 5 who married and moved away. The reason for mentioning the children is that during this discussion we learned of a social problem on the island that had not previously been mentioned. This is the availability of a drug called "ýama" on the island. It appears to be a kind of methamphetamine that is used by the fishermen who need to stay awake at night. She was very worried about her 18 year old son who she says is "addicted". He has been trying to abstain, and has been successful for a couple of weeks. However, she is not sure how long this will last. The aunt said that the drug is available locally, that is does not come in from Thailand. However, more investigation is needed to confirm this.

What is clear is that there is an undiscussed drug issue among the men who fish at night, and that there are no treatment facilities available for these young men.

(3) What changes have they seen in the environment?

The aunt said that she had definitely seen changes in the environment over the past 15 years. For example, there has been a decrease in the amount of both snails and fish. There had also been a lot of erosion along the beach. When she first arrived there were around 20 more meters of beach.

She noted that since the formation of the CPA, together with the ban on the charcoal industry, that the mangroves have been restored, and that with the restoration of the mangroves, the aquatic resources living in the mangroves had increased.

(4) What do they know about peat?

When the aunt were asked if she knew about *dey momouk*, the answer was no, she did not know what this is. After Sonim explained what *dey momouk* is, she said, yes, she have seen this kind of soil, adding that it is a bit salty.

The aunt said that she has seen peat in the mangrove areas, but that she still doesn't understand why peat is considered good, and why it should be protected.

(5) Recommendations

The Cham families living on Boeung Kachhang appear poorer than the families living in the core area of the village. For example, they do not own land on which to build a house, and the house they currently live in is much cruder and simpler than most of the houses in the northeastern quadrant of the village. Their being Cham as opposed to Khmer, however, does not seem to be the primary factor determining their poverty. Instead, they face the same problems with their lives that the rest of the villagers do.

Nonetheless, because of their poverty, attention should be given during project implementation to including these families in income generating activities.

Although the families said that they planned to move closer to the village after the plan to build a new zone with houses, a vat and health center is completed, because the village leaders do not yet have funding to implement this plan, there is no definite time when they will be able to do this. Thus, I strongly suggest that project implementers address the needs of these poorer members of the community. Although it was not in evidence at this time, project implementers should be aware of possible discrimination towards the Cham families.

b. Youth

The youth in Boeung Kachhang have more opportunities than those living in Koh Kapik because it is close to the mainland and Koh Kong city. As noted above, there are currently two factories within daily traveling distance near the Thai border. One is a Thai-owned factory that makes clothes, and the other is Japanese-owned factory that makes wires and spare parts. We were told that in Boeng Kachhang approximately 25 young women between the ages of 18-35 work at the factory. On average they can earn USD 180 per month, but can earn as much as USD 300 per month if they do overtime.

The villagers reported that only about 8 to 9 men worked at the factories, and if they worked the night shift they could earn as much as USD 250 per month. The men working at the factories were slightly older than the women, ranging from 20-30 years of age.

We had the opportunity to conduct a small group discussion in Boeng Kachhang with three young people under the age of 30, two women and one young man. Although they all lived in Boeung Kachhang, they had aspirations. Two of them, the young man and one of the women, had education. The young man, for example, had completed one year of university in Phnom Penh. However, he lacked funds to continue, and had to drop out. His family owns one of the fish ponds that raise sea bass, so the family is economically better off than other families. He wants to be a tour guide and help develop ecotourism on Boeung Kachhang.

Although we did not have a specific consultation with youth in Koh Kapik, we learned from discussions with several of the villagers that many of the youth move to Thailand. They go via personal connections, and their objective is to find work, to sell their labor. Again, contrary to my concerns, there did not seem to be any indication of trafficking in Koh Kapik. The Thai fishing industry is notorious for exploiting Cambodian and Burmese young men on fishing boats, most of whom are trafficked onto the boats. This does not seem to be happening on Koh Kapik.

One woman told us that her children were in Thailand, working as domestics in the family of a relative. She was planning to visit them soon.

VII. Impact Assessment and Final Recommendations

A. Final Recommendations

The table below is an excerpt of the project's results framework focusing exclusively on projects activities with ESMS relevance. The column on the right provides a summarized overview of the opportunities and recommendations – most of them already presented in the previous chapter - how the project could be further strengthened in order to increase the social outcomes and social acceptability of the promoted environmental changes. The idea of the table is to put the recommendations in direct relation to the project activities so as to enable their integration into project design. The recommendations demonstrate.

Results Chain	Activities relevant for ESMS	Opportunities and recommendations
Component 1 – Expansion	n of network of protected peatlands in Mek	cong countries
Output 1.1. Surveys to identify peatland ecosystems in Lao PDR, Cambodia and Myanmar undertaken	Workshops and on the ground surveys conducted in three target countries which will involve lower level officials	Because district level and lower officials still experience some confusion over the definition, identification and distribution of peat, this activity is important. It will enable these local officials to communicate better with the local communities.
Output 1.2. The value of peatland ecosystems for biodiversity and ecosystem services, climate change, land status and degradation level of important sites assessed and documented	Estimation of socio-economic value of peatland products (including focus group discussions with villagers to understand peatland uses, estimation of monetary and non-monetary benefits of peatlands to communities)	This activity is very important, and will not only help the project team, but will help the communities to understand better the value of the livelihoods. It should be noted, however, that focus groups to understand peatland uses by surrounding communities were conducted as part of the field mission for this SIA. However, the time to conduct these focus groups was limited, and although some information was collected on the monetary benefits of the peatland products and NTFP products, more detailed work is needed. Thus, the activity should be implemented, but, in order to avoid complete repetition, I recommend that the Project Team review the data that has already been collected in order to guarantee that their own focus groups are more "focused" and, hence, worthwhile.
Component 2 – Capacity a	and national planning in target countries s	trengthened
Output 2.1. Awareness and understanding of functions and importance of peatland ecosystems in targeted countries built	Conducting awareness raising activities to improve understanding of peatlands and sustainable management in the three countries	Based upon the information gathered during the SIA mission, this activity is extremely important. The consultant found that in both Lao PDR and Cambodia not only DO the officials at the provincial and district level lack a clear understanding of what is peat, but that knowledge at the community level is even lower. The communities lack, not only, a clear understanding of what peat is, they also do not understand why it is important to protect and preserve it. Identifying peat and where it is in their villages is also a problem. There is no specific word for peat in the Lao language, only a generic term for wetlands. The Khmer word used by environmental professionals is not immediately understood by local community members. Thus, before the project can move forward, it is critical for all of the communities: a. to know what is peat,
		 b. to be able to distinguish it from other kinds of soils in the wetlands, and c. to know why it is important to protect (not just globally, but for them personally)

Results Chain	Activities relevant for ESMS	Opportunities and recommendations
	ration of Best Management Practices	This knowledge is crucial if local communities are to participate meaningfully in the development of management strategies for the peatlands in and around their villages. I recommend that the project considers developing materials for these workshops not only in the national languages, but, if relevant, in ethnic minority languages as well. For example, the project team should consider producing materials in the Brao language for the Brao communities in the Paksong District, Lao PDR, and in the Shan language for the communities in the Inle Lake area, Myanmar. Before deciding to conduct this activity, it is important to test the ability of the ethnic minorities to read, write and speak the national language, and to test the materials. Some of the vocabulary will be very scientific, and even if there are Khmer, Lao or Burmese translations for specific scientific words and concepts, there is no guarantee that the local communities will understand.
Output 3.1. Protection and sustainable use of	Activity 1: Participatory identification and demarcation of important areas	All of the activities envisioned under this component are critical for successful project implementation.
the peatlands in <i>Peam Krasop Wildlife Sanctuary</i> enhanced (Cambodia)	with PKWS; creation of signs an awareness around these signs, including • determination exact extent of peatlands, functions and value; design "regulations" for sustainable management; if necessary modify current PKWS zoning system; done in inclusive, participatory process to avoid any negative impacts on vulnerable groups. In case any access restrictions result from these activities, mitigation measures to compensate livelihood losses developed and agreed; • Installation of two signs • Awareness raising of local communities • Capacity building for local officials	A non-scientific visual assessment by the SIA team seems to confirm that there are peat layers everywhere in both of the pilot villages, i.e. Koh Kapik and Boeung Kachhang. In Boeung Kachhang in particular, it is quite possible that people's houses are sitting on top of peatlands. If the peat surveys confirm this scenario, then, close consultation with peat experts, together with the communities, will be necessary to determine what activities are and are not acceptable for the villagers. Depending on the consultations/conclusions, the ESMS Standard on Involuntary Resettlement and Access Restrictions might be triggered. In light of this possibility, elements for a process framework have been formulated that describes a strategy to identify impacts and agree on measure for mitigating impacts in close consultation with the communities (see Annex D). From these consultations, it is clear that most villagers do not understand what peat is, nor do they understand why it is important, and as a result they use it. In order to resolve this problem, IUCN needs to undertake the following activities: 1. Make a clear and accurate map which contain the following elements: a. Boundary of the PKWS b. The four zones within the PKWS c. Boundary of the Ramsar Site within the PKWS d. The villages within the PKWS with their names e. The Community Protected Areas within the Sustainable Use Zone f. And, most important the location of the peat areas Maps should be made for the entire PKWS/Ramsar Site area, and then, separate maps should be drawn for each of the pilot villages also indicating these five elements. 2. Design awareness raising and educational materials. Before the project can move forward, it is necessary for all of the communities: to know what peat is, to be able to distinguish it from other kinds of soils, and to know why it is important to protect (not just globally, but for them personally). Only then can the communities participate meaningfully in a discussion about the ways they currently use or do not u

Results Chain	Activities relevant for ESMS	Opportunities and recommendations
	Activity 2: Developing sustainable livelihood practices including the following sub-tasks 2. Conducting rapid socioeconomic survey to identify households that are dependent on mangrove forest resources and other peatlands natural resources 3. Prioritizing households (women/men) that will be supported for livelihood development activities based on their use of peatland resources and vulnerability. 4. Developing livelihood improvement models for the participating households (women/men). 5. Implementation of the livelihood improvement activities involving roughly 100 HH; including training villagers, support for purchase of materials, technical support, monitoring and evaluating the process and outcomes, and adjustment as necessary. 6. Forming user groups to better manage their uses of peatland natural resources within the two target villages of Boeng Kachhang and Koh Kapik (managed resources will include fish resources and other nontimber products/ecosystem services). Again, roughly 100 HH will be targeted.	General comment (for both countries): This activity and its set of sub-tasks are important and essential for developing livelihood programs for the project that will reduce the pressure on the peatlands by generating additional income for the villagers. It should be noted that during the SIA field mission, the team initiated sub-tasks 2.1 and 2.2, and formulated a preliminary list of ideas for income generating activities requested by community members. In order to avoid duplication with the SIA mission, and to avoid the communities having to repeat the same kind of consultation during project implementation, it is recommended that the project implementation team narrow their focus when they implement this activity of Component 3. For example, there is probably no need to repeat the cultural and natural resource mapping exercise. Instead, the team should take the results of this and other reports and delve deeper. Koh Kapik was the poorer and more vulnerable of the two sites and is plagued by the lack of fresh water. Accordingly, one of their simpler requests is assistance for ways to obtain and store more fresh water. The families living on the island rely nearly 100% on marine resources, both in the mangroves and the open sea. Developing sustainable livelihood activities would both reduce pressure on marine resources, and help to lift the villagers. Discussions with some of the women focused on Savings Group. One recommendation is to invite the founder of the highly successful Savings Group in Boeung Kachhang to lead of trainers from his group to conduct the training and provide follow-up monitoring. A second recommendation for Koh Kapik is to assist them in developing eco and cultural Community Based Tourism. Their island is saturated with a rich history dating from the 19 th century and which in connected with both the Kingdom of Siam and the French. The remains of French colonial structures on Koh Moul enhance the French narrative. The island is surrounded by dense mangroves which would provide the eco-

Results Chain	Activities relevant for ESMS	Opportunities and recommendations
Output 3.2. Protection and sustainable use of the peatlands in and around <i>Beung Kiat Ngong</i> enhanced (Lao PDR)	Activity 1: Participatory identification and demarcation of important peatland areas near to but outside of the Beung Kiat Ngong Ramsar site; creation of signs and awareness around these areas, including • determine and demarcate priority areas, design "regulations" for sustainable management; • in case access restrictions result from these activities, mitigation measures to compensate livelihood losses developed and agreed • Installation of signage • Awareness raising • Capacity building for local officials Note: Activity 1, 2 and 3 are largely same in Lao PDR as for Cambodia	The current utilization of the peatland resources seems sustainable; there is a certain probability, though, that the peatland survey identifies unsustainable use of peatland. However, because this probability is considered as very low the Standard on Access Restrictions is not triggered. With regard to the current management plan for Beung Kiat Ngong, and the development of management plans for Beung Paphat, it is suggested that, in consultations with the communities, cultural and traditional knowledge be explored as mechanisms for better management of the peatlands. For example: 1. Sites designated as sacred by local communities are usually treated with more respect than other community areas. The sacredness of a forest or water (stream, pond, etc.) usually serves as an indigenous protective measure. The sacred aspect of Beung Paphat could be further explored with local community leaders as a potential mechanism for enhancing conservation of the natural resources they use in the peatland area. The sacred area in the river for the spirit Kaeng Na'ang is another example. 2. Explore the significance of "ancestral land". One of the IUCN staff observed that farmers in this area place great value on their land. He said, for example, in the Bolaven Plateau, villagers rejected an offer of outsiders to buy their peatlands. They said that this was their ancestral land, and it was not for sale. He feels that the people in this area might feel the same way. It is worth exploring and lending support to this indigenous respect for traditional land as a mechanism to safeguard the land from future investors.
Component 4 – Regional	Activity 2: Developing sustainable livelihood practices, including rapid socio-economic survey to identify households that are vulnerable and highly dependent on mangrove and other natural resources, development and implementation of livelihood improvement models including training, support for purchase of materials, technical support; Target group: roughly 25% or a total of 100 (out of 440) households in the three target villages around Bung Naphat	During the consultation in the villages in Lao, the consultant's attention was directed to the poorer, often, landless families, frequently headed by women and which are not always included in income generating activities implemented by other projects. Thus, it is suggested that sustainable livelihood practices should specifically target poorer families in the three pilot villages. Because of their landlessness and poverty, these families heavily rely upon extraction of the aquatic resources from the wetlands and peatlands as their only source of income, hence developing alternative livelihoods in consultation with them is also a mechanism to reduce pressure on peatlands. The following activities were suggested by the community members: 1. Acquiring land on which to grow rice 2. Development of fish ponds 3. Raising small livestock (poultry, pigs) 4. Mushroom growing as a cash crop 5. Learning / upgrading tailoring and cooking skills 6. Developing ecotourism activities.

APPENDIX A – TRAVEL ITINERARY FOR CHAMPASAK, LAO PDR

The Lao Team for the Mission:

Mr. Oudomxay Thongsavath

Mr. Khamphat Xeuasing

Ms. Linda Klare, IUCN Headquarters, ESMS Coordinator

Ms. Heather Peters, IUCN SI Consultant

Monday - 8 May 2017

Travel to Champassak

14:30 - Meeting at PoNRE (Department of Natural Resources and Environment, Champasak Province)

Present:

Mr. Soupany Sylipoungno, Director of the Department

Mr. Ponxay, Deputy Director

Mr. Sengsoulivanh, Head of the Water Section

Also present: IUCN team: Linda Klare, Heather Peters, Oudomxay Thongsavath and Khampat

16:00 – Linda, Heather, Oudomxay Thongsavath and Khamphat Xeuasing had informal meeting to review schedule and other matters

Tuesday - 9 May 2017

09:00 - meeting at DoNRE, Pathoumphone District

Present:

Mr. Duang Vilai Xaisimeuang, Deputy Director, DoNRE

Mr. Phouvieng, Head of Meteorology Unit, PoNRE

Ms. Samai Maymanee, Head, Lao Women's Union, Champasak Provinc

Lunch in Pathoumphone District

Visit to Ban Saming

15:30 – visit to Kingfisher Eco-Lodge and the section of the Ramsar Site which borders on the lodge and "loumpa"

Wednesday - 10 May 2017

Morning: visit to Ban Kaeng Na'ang Lunch at Ban Kaeng Na'ang

Afternoon: First visit to Ban Thongxay

Thursday - 11 May 2017

All day at Ban Kala

Linda Klare leaves for Thailand

Friday - 12 May 2017

All day at Ban Thongxay

Saturday - 13 May 2017

All day at Ban Kaeng Na'ang

Sunday - 14 May 2017

Morning – reviewed materials with Oudomxay Thongsavath and Khamphat Xeuasing

Team Lunch (invited by consultant)
Afternoon – worked on report

Monday - 15 May 2017

Oudomxay Thongsavath and Khamphat Xeuasing leave for Savanakhet Morning – worked on report

Afternoon - fly to Vientiane

Meeting at hotel with Ms. Phoutsakhone Ounchith, Head of Office, IUCN Lao PDR

Evening – dinner with Mr. Jim Chamberlain, social expert for various projects in Lao PDR and Mr. Paul Eshoo, ADB consultant for the ADB's Tourism Infrastructure Project

Tuesday - 16 May 2017

Morning - meeting with Mr. Rik Ponne, Advisor to NTA's GMS Tourism Project

Lunch with Mr. Paul Eshoo

Afternoon - meeting with ADB

Mr. Steven Schipani, Senior Project Officer in charge of GMS Tourism projects

Ms. Sisavanh Phanouvong, Senior Project Officer

(Environment and Natural Resources)

Officer in charge of the Biodiversity Conservation Corridors Project (BCC)

APPENDIX B - TRAVEL SCHEDULE FOR KOH KONG, CAMBODIA

The Mission Team for Cambodia:

Mr. Veth Sonim

Ms. San Daneth

Ms. Ariel Stenger, Intern, IUCN Regional Office, Bangkok

Ms. Heather Peters, SI Consultant, IUCN

Monday - 22 May 2017

Travel to Ko Kong

14:00: meeting at Department of Environment:

Mr. VETH Sonim, IUCN field coordinator based in Koh Kong

Ms. SAN Daneth, IUCN Intern from Phnom Penh

Ms. Ariel Stenger, IUCN intern from Regional Office

Mr. HUN Marady, Deputy Director, Department of Environment, Koh Kong Province

Mr. OUL Rann, Director, Peam Kasop Wildlife Sanctuary (PKWS)

Tuesday - 23 May 2017

08:00: Meeting at Department of Environment (DoE)

Mr. Hun Marady, Deputy Director, Koh Kong DoE

Mr. Oul Rann, Director, PKWS

Mr. Nou Ngoy, Officer from Fisheries Administration Cantonment, Koh Kong

Mr. Soun Nann, Chief of Agricultural Extension Office, Department of Agriculture, Forestry and Fisheries (DoAFF)

Note: the Fisheries Administration and Department of Agriculture, Forestry and Fisheries have been combined into one department.

Noon

Traveled by car to the Peam Krasop Village #1 at the entrance to the Peam Krasop Wildlife Sanctuary (PKWS).

Had a working lunch together with Mr. Siet Samboum, Committee Chief of the Peam Krasop Community Protected Area, and leader of the ecotourism activities in this commune.

PM Traveled by speedboat to Koh Kapik

Wednesday – 24 May 2017

All day at Koh Kapik

Thursday - 25 May 2017

AM – reviewed materials gathered so far 13:00 – traveled to Boeng Kachhang

Friday – 26 May 2017

Entire day at Boeng Kachhang

Saturday – 27 May 2017

AM - visited Cham families living on the island of Boeng Kachhang

Sunday - 28 May 2017

Daneth returns to Phnom Penh

APPENDIX C – METHODOLOGIES

1. Methodologies Used for the Assessment

The consultant used a multi-pronged research strategy. She began by conducting a desk review of available reports and secondary materials. A bibliography of these materials is attached to this report.

The field methodology employed two primary participatory tools together with focus group discussions and in-depth interviews:

a. In each village, the villagers were asked to produce a cultural and natural resource map of their village area. This was done either by drawing on a large sheet of paper with colored markers, or constructed on the ground using a wide variety of natural resources (stones, branches, shells, etc.). The villagers were asked first to mark the location of important features of the village itself, for example, the school, temple, health center, sacred spaces, etc. Second, they were asked to identify the areas around the village that had the natural resources they used.

Follow-up questions and discussion took place when the villagers introduced the map to the team.

b. In each village, villagers were asked to make seasonal calendars, one by the women and one by the men. The seasonal calendars produced in Champasak divided their resources into those collected during the Dry Season versus those collected during the Rainy Season. The seasonal calendars produced in Koh Kong, Cambodia, were more detailed, providing a month by month description of the resources they collected.

When the representative of each group presented the results, they were asked to identify where they resources were collected by referring to the village maps, and also to describe how the resource was gathered or collected.

Information about important seasonal festivals and holidays was also collected.

- c. Focus group discussions were conducted with smaller groups, for example women, youth and vulnerable people such as poor families. These discussions included the women or youth identifying problems and concerns with regard to the environment and peatlands.
- d. Finally, a number of semi-structured, in-depth interviews were conducted with specific individuals, for example, village elders to collect the history of the village.

APPENDIX D – ELEMENTS OF A PROCESS FRAMEWORK

Recommendations for the sub-project in Cambodia

1. Introduction

Based upon preliminary surveys conducted by a peat expert, a large number of peat and potential peat areas have been identified in and around the two pilot sites, Koh Kapik and Boeung Kachhang, as well as in and around the other 11 villages across the entire Peam Krasop Wildlife Sanctuary (PKWS). The existence of peatland has also been confirmed by the non-scientific visual assessment and consultation carried out by the SIA team in the two pilot sites

Management zoning and use regulations for the PKWS are in place, distinguishing among others two types of zones where certain sustainable use of natural resource is allowed: (i) the Community Zone; and (ii) the Sustainable Use Zone. However, these regulations have not considered peat and its particular conservation needs. As a consequence, it is unclear whether or not peat areas are found within those two zones and whether there are any livelihood activities - currently permitted in these two zones – that might need to be restricted in order to protect the peat (e.g. harvesting of coastal and marine or forest resources, construction of houses). A decision about the need to update the zoning and to apply potential resource restrictions can only be taken once the peatlands survey and functions and values assessment has been carried out at the beginning of the project.

However, given the small scale use of peatland resources verified in the two pilot sites by the SIA, the use of peatland resources in the PKWS is overall considered sustainable and that it is rather unlikely that restrictions will need to be put in place. The general rule of the Standard on Involuntary Resettlement and Access Restrictions is that projects where impacts from access restrictions are identified need to develop an Action Plan for mitigating those impacts; and that the Action Plan is either developed during the design phase - or at least a Process Framework that describes how the plan will be developed during the project implementation; and that both, development of the actual action plan or of the process be done in consultation and agreement with the affected communities. However, in this particular case where the need to put in place access restrictions which might cause social impacts is considered relatively unlikely, it has been agreed with the ESMS Coordinator that it will be sufficient to provide only elements of a process framework without the need to launch a consultation process with potentially affected groups at this stage.

2. Provisions for ensuring compliance with the Standard

Mapping of peat in relation villages and existing zoning

A potential need for restricting the use of peatland resources will be established by the peatlands survey and functions and values assessment to be carried out at the outset of the project. It is assumed that the peat survey will provide clear and accurate maps containing the following features:

- Location of verified peat areas
- All villages and human settlements present within the PKWS
- Boundaries of the different demarcations and zones:
 - Peam Krasop Wildlife Sanctuary (PKWS),
 - o Ramsar Site within the PKWS,
 - Four use zones within the PKWS: Core zone, Conservation Zone, Community Zone and Sustainable Use Zone;
 - Community Protected Areas within the Sustainable Use Zone

Maps should be made for the entire PKWS area, and then, separate maps should be drawn for each village also indicating the features mentioned above. These maps will enable the determination of the location of the peat areas in relation to the communities and the surrounding areas which are currently used and designated either as Community Zone, Sustainable Use Zone or Conservation Zone. Once this relationship is established, it will be possible to confirm whether the current zoning is sufficient for protecting peat or whether there are peat areas where the current zoning and the associated use regime are insufficient to ensure peat conservation. This will involve clarifying the range of scientifically acceptable and non-acceptable activities in peat areas and should be done in consultation with relevant officials from the DoE and the PKWS. These discussion should include the entire range of activities currently practiced on the peat areas (e.g. settlement, agriculture, harvesting marine or forest resources, collection of NTFPs, eco-tourism etc.); however, it is unlikely that resettlement of houses or other community infrastructure will be required for peat protection.⁵

Community Consultation

The next stage in the process is to involve those communities where important peat areas overlap with the community's current use areas (Community or Sustainable Use Zones) and to consult with legitimate representatives of these villages. Representatives should include a combination of official representation, for example, the village chiefs and representatives from the Community Protected Area (CPA) Committees, but also non-officials drawn from other sectors of the village society. The latter could include teachers from the schools, people whose lives depend solely on the collection of resources from the focused areas, vulnerable groups as well as representatives from the business sector. Women need representation as well as they play roles not only in gathering the resources, but are also earning income as small traders. Women from the Savings Group should also be part of the discussions.

Consulting with men and women representing all sectors of the village society will allow verification of the community's current resource use from respective peat areas and identification of impacts from a potential ban or restrictions on accessing or using areas. Impacts might be caused by restricting access to sites or by banning or restricting the use of natural resources with importance for livelihood or for cultural activities practiced by the communities. The consultations should also help understanding of the significance of identified impacts.

The consultations should follow FPIC principles and lead to an agreed action plan documenting impacts from access restrictions, significance of social impacts as well as outlining measures for their mitigation. The development of the action plan should adhere to the provisions outlined in the respective ESMS Guidance Notes⁶ and should follow the overarching principle that impacts from access restrictions and negative economic and livelihood impacts should be avoided or minimized to the maximum extent possible. In cases where unsustainable practices have been identified, the aim is to agree with the respective groups on ways to change the unsustainable practices while minimizing social impacts; if impacts remain, compensation measures will be provided by the project to mitigate impacts. In cases where it is considered too difficult to minimize or compensate impacts or where agreement with affected groups cannot be achieved, small-scale loss of peatland will be accepted.

⁵ Projects that require resettlement of people (e.g. their physical relocation) are considered high-risk projects and are generally avoided by IUCN. High-risk projects require a full Environmental and Social Impact Assessment (ESIA) and a comprehensive consultation and disclosure process. In the unlikely case that resettlement cannot be avoided, prior approval of the IUCN ESMS Coordinator is required and the development of a Resettlement Action Plan (RAP) will need to be pursued.

⁶ See IUCN ESMS Action Plan to Mitigate Impacts from Access Restrictions - Guidance Note

Roles and Responsibilities

The overall responsibility for carrying out a mutually accepted process for obtaining consent of the affected communities is with IUCN. Staff from the ARO regional office have extensive experience in conducting participatory and inclusive consultation processes. IUCN will be responsible for providing evidence that the parties agree on the outcome of the negotiations.

Recommendations for the sub-project in Lao PDR

1. Introduction

Based upon preliminary observations and consultation in the three villages selected by the project as demonstration sites (Ban Thongsay, Na'ang, and Kala), the SIA concluded that the current use patterns in these villages acceptable for peat protection. The ways the villagers use the beung are traditional, and they seem to have little harmful impact on the peat itself, even the custom of digging loumpa. While the SIA has only carried out in-depth consultations in the three pilot villages, based on consultation with other stakeholders and key informants it is assumed that the situation in other villages in around Beung Paphat is very similar. Full certainty, however, will only be achieved after carrying out the comprehensive peatland survey and function assessment at the outset of the project. Hence it doesn't seem likely that the Standard is triggered and that there is a need to restrict villagers' access to the peatland area or their use of peatland resources.

The general rule of the Standard on Involuntary Resettlement and Access Restrictions is that projects where impacts from access restrictions are identified need to develop an Action Plan for mitigating those impacts; and that the Action Plan is either developed during the design phase - or at least a Process Framework that describes how the plan will be developed during the project implementation; and that both, development of the actual action plan or of the process be done in consultation and agreement with the affected communities. However, as in this particular case it is considered not very likely that the peat survey identifies harmful activities which would need to be restricted, it has been agreed with the ESMS Coordinator that it will be sufficient to provide only elements of a process framework without the need to launch a consultation process at this stage with potentially affected groups.

2. Provisions for ensuring compliance with the Standard

The survey and assessment tasks associated with Outputs 1.1-1.3. as well as the activities under output 3.2. describe the peatland assessment and the participatory process that will be undertaken to verify important peatland areas in and around Beung Kiat Ngong and to identify and agree on measures to ensure sustainable management of those areas. This includes mapping the exact extent of peatlands within and around Beung Kiat Ngong and determining and demarcating priority areas for peatlands conservation and restoration.

While the consultations carried out during the SIA in the three pilot sites have not found any practices that appear harmful to peatland, there is a small probability that other villages in and around Beung Kiat Ngong use peatland resources in a less sustainable way. Restricting such resource use might negatively affect the livelihood of these communities. The Standard on Involuntary Resettlement and Access Restrictions requires that any decision about access restrictions promoted by the project has to be accompanied by a rigorous consultative process in order to ensure that social impacts are avoided or minimized to the maximum extent possible. This should include the following elements:

- Identification of current use of peatland for livelihood purpose:
- Assessing the communities' dependency on peatland resources, disaggregated by social groups (in particular vulnerable groups, women and indigenous communities where present);
- Assessing the impacts from access restrictions planned by the project and their significance, including material impacts as well as non-material impacts taking the spiritual or cultural values of the resources into consideration:
- Identification of measures to avoid access restrictions or minimise social impacts from restrictions. If residual impacts remain develop a fair and adequate strategy for compensation and livelihood enhancement; this strategy must assure that affected people are provided with at minimum the same level and quality of livelihoods and security that they had before.

The analytical steps described above should be carried out together with legitimate representatives of affected groups; some of the steps might require more in-depth consultation of affected individuals, men and women. The consultations should follow FPIC principles and lead to an agreed action plan documenting impacts from access restrictions, significance of social impacts as well as outlining measures for their mitigation. The development of the action plan should adhere to the provisions outlined in the respective ESMS Guidance Notes⁷ and should follow the overarching principle that impacts from access restrictions and negative economic and livelihood impacts should be avoided or minimized to the maximum extent possible. In cases where unsustainable practices have been identified, the aim is to agree with the respective groups on ways to change the unsustainable practices while minimizing social impacts; if impacts remain, compensation measures will be provided by the project to mitigate impacts. In cases where it is considered too difficult to minimize or compensate impacts or where agreement with affected groups cannot be achieved, small-scale loss of peatland will be accepted.

The overall responsibility for carrying out a mutually accepted process for obtaining consent of the affected communities is with IUCN. Staff from the ARO regional office have extensive experience in conducting participatory and inclusive consultation processes. IUCN will be responsible for providing evidence that the parties agree on the outcome of the negotiations.

⁷ See IUCN ESMS Action Plan to Mitigate Impacts from Access Restrictions - Guidance Note

APPENDIX E - OTHER ORGANIZATIONS WORKING IN THE PROJECT AREA

A. Lao PDR

Target Site	Organization and Project Name	Project dates	Project activities	Success or Notes about the project activities
Ban Thongxay	ADB Biodiversity Corridor Project (BCC)		 Village Development Fund (USD 5,000) Building a new school Provided seedlings for hardwoods in Community Conservation Forest 	Poorer women did not feel comfortable participating in some activities because they had to repay ADB if they failed.
	GAPE Canadian NGO founded by lan Baird		 Conservation work Developing new varieties of rice which are fast growing but do not need fertilizers and tastes good. Goal: to increase production. Planting banana trees Seedlings for family gardens Skills training in: Tailoring Cooking Temple decorations Electricians construction Cultivating mushrooms 	GAPE sends trainees to Pakse or Paksong. They are expected to return to their village afterwards to use new skills
	World Vision	Project completed	Funded the purchase of 10 buffalo	
Ban Kaeng Na'ang	ADB BCC		 Village Development Fund and training how to manage it Conservation Training Creation of community-based Forest Patrols to monitor forests. Pig/livestock project and training on raising pigs Built a new school 	
Ban Kala	ADB BCC		 Forest Conservation Village Development Fund Livestock – pig exchange 	Anywhere the ADB BCC project is present, there is a community committee to oversee the VDF. This committee could prove a useful mechanism in the future.

GAPE	Protection of Community Forests Building a school Skills training in: Tailoring Motorbike Repair Cooking construction Cultivating mushrooms Motorbike repair Short-term para legal training Nursing (2 people) Teaching (2 people)	GAPE sends trainees to Pakse or Paksong. They are expected to return to village afterwards to use their new skills. Nurse and teacher training is completed
SUFORD	Forest protectionSavings Fund for the Community	

B. Cambodia

Target Site	Organization and Project Name	Project dates	Project activities Success or Notes about the project activities
Koh Kong and Mondolkiri	ADB Biodiversity Conservation Corridor (BCC) Project	September 2010- September 2019	 Support infrastructure, such as the Community Center we used in Beoung Kachhang; large basins for collecting rain water, and solar panels Capacity Building: Strengthened the Savings Group at Boeung Kachhang Livelihood Improvement: integrated faming systems; chicken raising; growing vegetables Bio-diversity protection: restored mangrove areas
Peam Krasop Village	IDRC	2015 - 2016	 Support infrastructure, such as the Community Center in Beoung Kachhang; Provide large basins for collecting rain water, and solar panels Capacity Building to strengthen the Savings Group at The savings group is no longer working due to mismanagement, but villagers are eager to learn effective financial management skills to relaunch the

Koh Kong	DANIDA		Boeung Kachhang Livelihood Improvement: integrated faming 4 systems; chicken raising; growing vegetables Bio-diversity protection: restored mangrove areas Coastal Resources	savings group. The basins for water storage are not big enough or in good condition and the villagers expressed interest in a large concrete water basin for collective use.
Koh Kong and	IUCN Trans-	2015-2016		
Trat Provinces	boundary dolphin conservation along the coastline of Thailand and Cambodia	2015-2016	 Improved practices of local fishing communities, including enhanced spatial planning that identifies dolphin conservation areas Research and surveys conducted on dolphin populations, migration patterns, causes of death, and threats to their habitats Strengthened local dolphin conservation networks in Trat, Thailand, as well as in the Peam Krasop Wildlife Sanctuary and adjacent areas in Cambodia Knowledge and experience on dolphin conservation and coastal livelihoods shared with local communities, enhancing their capacities to support dolphin conservation efforts An appropriate dolphin watching tourism pilot developed through collaboration with local administrations to ensure its sustainability 	
Koh Kong	CCA MoE		Impact of Climate	
Province	0011: 10		Change	
Koh Kapik	SCW (Save Cambodia's Wildlife)		 Provided basins to collect rain water. However, most of 	

			them are now broken Gave capacity building to members of the Community Protected Area Committee on doing an inventory of their resources; management plan; study tour to Kampot for Community-Based Tourism. Note: the villagers have formed a CBT committee, but not up and running yet — they need more help Technical assistance for raising crabs	
Peam Krasop	IDRC International Development Research Centre, Canada		funded research on ecotourism for community in Peam Krasop Village	
Koh Kapik	Care International		 provided basins to collect rain water, identified two people person from the village to study veterinarian gave mosquitos nets. 	Veterinarians returned, but did not stay on the island.
Koh Kapik	CZN		Helped to set up a Savings Group for women about 7 to 8 years ago. The group was only for women. However, the group failed.	The structure was not good. They would like to try again, to restructure it and have better regulation and better capacity building.
Boeung Kachhang	Save the Children Norway	2014 - current	• Established a life skills project for the primary school children where they raise crabs and fish in areas around the school. They raise chickens in a house behind the school, and they also have a ½ ha in front of	

the school where they have a
mangrove nursery (the seedlings
come from the BCC
project). On the
north side of the
school is a plot for
growing morning
glory.
Built a kitchen for the school

APPENDIX F – ADDITIONS TO THE STAKEHOLDERS' ANALYSIS

Stakeholder	Discussion and Consultations during Project Preparation	Interest in the project	Influence on the project	Impact of the project on the stakeholder (& potential risks)	Role in project or other forms of engagement				
B. Cambodia									
Boeung Kachhang Village Bak Klong Commune PKWS	31 people were consulted from Boeung Kachhang during the May SIA, including 2 representatives from the Cham community. Members of the Cham community had not been interviewed previously. In addition, small focus groups were conducted with women and youth. The consultation confirmed the results obtained from the December 2016 visit by the PPG.	High: Activities directly related to the daily life of the communities; project aims to support sustainable livelihoods. All community members expressed an interest in learning more about peat and why it is important.	High: the village has a strong and active CPA committee which will help tp guarantee implementation and monitoring.	High: Positive: improved livelihoods and protected ecosystems Negative: the widespread distribution of peat might result in some access restrictions	Demonstration site for best management practices				
Koh Kapik Villages 1 and 2 and Koh Sra Laok Kaoh Kapik Commune) PKWS	21 people were consulted from Koh Kapik Villages 1 and 2. This included 2 persons from Koh Sra Laok.	High: Activities directly related to the daily life of the communities; project aims to support sustainable livelihoods. All community members expressed interest in learning more about peat and why it is important.	High: the villagers are poor, and use the mangrove resources extensively. They acknowledge the positive impact that the mangrove restoration project has had on their lives, and they support additional projects to protect and conserve their environment and ecosystems. Some appear to be using small amounts of peat as fertilizer for their fruit trees.	High; Positive: villagers see the possibility for improved livelihoods and improved ecosystems. Negative: the widespread distribution of peat might result in some access restrictions	Demonstration site for best management practices				
C. Lao PDR									
Ban Thongxay	41 villagers were consulted during the May SIA. This village has ownership has official ownership over Beung Paphat,	High: Activities related to the daily life of the communities; project	High: the villagers are already participating in the ADB BCC project	High: Positive: the villagers see the possibility for	Demonstration site for best management practices				

Stakeholder	Discussion and Consultations during Project Preparation	Interest in the project	Influence on the project	Impact of the project on the stakeholder (& potential risks)	Role in project or other forms of engagement
	another wetlands with peat that is outside the BKN Ramsar site but is within the PA. Special attention was given to conducting small focus groups with poor families, women and youth	aims to support sustainable livelihoods People expressed interest in learning more about peat and why it is important	and have formed a committee to manage their VDF. This provides a mechanism for better implementing and monitoring this project. It also provides a potential grievance mechanism.	improved livelihoods and for an improved ecosystem. Negative: if the villagers learn more about the economic value of peat, they might be tempted to sell it commercially	
Ban Kaeng Na'ang	37 villagers were consulted during the May SIA. This village is one of three villages which use the Beung Paphat wetlands. Special attention was given to conducting small focus groups for poor families, women and youth.	High: Activities related to the daily life of the communities; project aims to support sustainable livelihoods. People expressed interest in learning more about peat and why it is important	High: the villagers already participate in the ADB BCC project, and like Ban Thongxay have formed a village committee for their VDF. This committee will be useful for implementing and monitoring the peat project.	High: Positive: the villagers see the possibility for improved livelihoods and improved ecosystem. Negative:	Demonstration site for best management practices
Ban Kala	28 villagers were consulted during the May SIA. This village is one of the three villags which uses the Beung Paphat wetlands extensively. This village was added to the list of pilot villages and Ban Saming was removed.	High: Activities related to the daily life of the communities; project aims to support sustainable livelihoods. People expressed interest in learning more about peat and why it is important.	High: the villagers already participate in the ADB BCC project, and like the villages above, have formed a committee to oversee their VDF.	High: Positive: the villagers see the possibility for improved livelihoods and improved ecosystem.	Demonstration for best management practices

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GEC 2015 – reference is mentioned in the Projet Document with regard to the SEApeat Project, but it is left out of the reference section in the Pro Doc I have. Could someone check on this. Thanks!

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